CHAPTER 6: SOCIO-ECONOMICS

Chapter Alterations

A6.1 This chapter has been updated in full to take into consideration the updated application proposals and the latest evidence that has been published on school places and capacity.

6.1 INTRODUCTION

6.1.1 This chapter of the ES has been produced by Savills to assess the Proposed Development in relation to the effects it would have upon existing and future population groups.

6.2 ASSESSMENT CRITERIA & METHODOLOGY

Previous Assessment

6.2.1 There have been no previous assessments in relation to the Proposed Development with the exception of the original socio-economic assessment provided when the outline planning application was submitted.

Scoping Opinion

6.2.2 The scope of this assessment was submitted to South Gloucestershire Council (SGC) in the Scoping Report, and informed the Scoping Opinion subsequently received from SGC (see Chapter 5). The comments received from SGC have been taken into account in the undertaking of this assessment. These include:

<u>SGC comment:</u> The ES will need to consider the socio-economic issues relating to the Proposed Development, including likely significant effects on social and economic conditions.

Response: This chapter meets these requirements.

<u>SGC comment:</u> A baseline desktop assessment will be required of the population density and demographic profile of the area, economy, employment and demand for local services, education and community facilities, a review of built community and cultural facilities, play areas and public open spaces at ward level.

<u>Response:</u> Paragraph 10.81 of the South Gloucestershire Core Strategy (2013) defines Community and Cultural Infrastructure as including (but not limited to):

- education facilities
- health & social care facilities

- police, fire & ambulance facilities
- libraries, museums & galleries
- community centres
- · youth, children's and childcare facilities
- arts & cultural centres and venues
- extra care & other older peoples housing needs
- local pubs & clubs
- places of worship
- training centres
- public & private sports & recreation facilities
- civic & administrative facilities
- allotments/community gardens
- public conveniences.

For the majority of social infrastructure the most appropriate geographic scale to assess the impacts of the Proposed Development is a walkable catchment (up to 2km) from the centre of the Proposed Development, in accordance with paragraph 10.84 of the Core Strategy (2013). The impacts of housing supply and employment effects are considered against the relevant housing market area and functional economic market areas.

Assessing the impact of the Proposed Development against the full list of community and cultural infrastructure, as defined by paragraph 10.81 of the Core Strategy, is considered excessive in the context of standard ES socio-economic impact assessments. The range of social infrastructure considered in this assessment is consistent with best practice in similar contexts and includes an assessment of the impact of the new population on education (early years, primary, secondary), primary health (GPs, dentists), open space (passive and active), child play space and community meeting space.

SGC comment: A cumulative assessment of other nearby developments will also be required.

<u>Response:</u> Section 6.9 provides an assessment of cumulative effects in accordance with the schemes identified in Table 5.3.

6.2.3 A departure from the submitted Scoping Request is to remove the impact on crime from the assessment. It is considered that the Proposed Development is unlikely to have a significant effect on crime in Thornbury, and as such it is scoped out of the Chapter.

Legislative Context

6.2.4 There is no legislation relevant to the undertaking of a socio-economic impact assessment.

Planning Policy and Guidance

National Planning Policy

National Planning Policy Framework (February 2019)

- 6.2.5 The NPPF (2019) gives policy direction on how development should be delivered in a sustainable manner, with a focus on community interest and social benefit. Development should perform an economic role by building a strong economy, perform a social role by supporting strong vibrant communities, and should perform an environmental role by contributing to and enhancing the natural built and historic environment.
- 6.2.6 Paragraph 80 states that significant weight should be placed on the need to support economic growth through the planning system.
- 6.2.7 Paragraph 72 of the NPPF states that the supply of new homes can often be best achieved through planning for larger scale development, including new settlements or extensions to existing villages and towns, where these are well located and designed, and supported by the necessary infrastructure and facilities.
- 6.2.8 Paragraph 91 states that the planning system can play an important role in facilitating social interaction and creating healthy, inclusive communities. Local Authorities should promote planning decisions that promote safe and accessible development that contain clear pedestrian routes, high quality public space and encourage the active and continual use of public areas.
- 6.2.9 Paragraph 92 notes that planning decisions should plan positively for the provision and use of shared space, community facilities such as local shops, meeting places sports venues, cultural buildings and other local services to enhance sustainability of communities and residential environments.
- 6.2.10 Paragraph 96 states that access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities.

Regional Planning Policy

Draft West of England Joint Spatial Plan (Submission Version)

- 6.2.11 The West of England (WoE) Joint Spatial Plan (JSP) was submitted to the planning inspectorate in April 2018, and is currently at Examination. The Examination Hearings were held in May / June 2019. Following these hearings the Inspectors wrote to the authorities expressing significant concerns over the soundness of the submitted plan. At the time of preparing this update, the response from the authorities had yet to be published. The relevant content of the submitted plan has been summarised below, however, this should be treated with caution for the above reasons.
- 6.2.12 The most recent draft of the JSP (Submission Version November 2017) makes provision for the supply of 105,500 new homes between 2016-2036; with a residual requirement beyond identified commitments and allocations within the adopted Local Plans of 44,000 additional new homes. South Gloucestershire is planned to accommodate a total of 32,500 dwellings over the 20-year plan period.
- 6.2.13 The emerging affordable housing target is 35% (draft Policy 3). All affordable housing tenures should include provision to remain at an affordable price in perpetuity for future eligible households (based on local incomes and house prices), or for the subsidy to be recycled for alternative affordable provision.
- 6.2.14 The submitted JSP is subject to significant unresolved objections, including in regard to the assessment of housing need.

West of England Strategic Economic Plan

6.2.15 The WoE Local Enterprise Partnership (LEP) has prepared a Strategic Economic Plan 2015-2030 which sets out how the region would develop its £25 billion economy, stimulating sustainable economic growth and facilitating up to 78,500 new jobs. Spatially, the strategy focuses resources on priority growth locations, which includes a network of Enterprise Areas. The closest are Avonmouth-Severnside, circa 10.5km to the south-west of the Project Site; which focuses on large scale manufacturing and distribution, Filton, circa 11.5km to the south, focusing on high technology jobs and Emersons Green also to the south (circa 13km) focusing on science based jobs.

Wider Bristol HMA Strategic Housing Market Assessment Update (March 2018)

6.2.16 The March 2018 Assessment represents an update to the earlier Wider Bristol SHMA (2015); and does not constitute a SHMA in its own right. The Wider Bristol HMA covers the City of Bristol, North Somerset and South Gloucestershire; with the City of Bath subject to a separate SHMA.

6.2.17 The Assessment confirms that the JSP is based upon job growth of 82,500 jobs across the WoE over the 20-year period 2016-2036.

West of England Economic Development Needs Assessment 2016

- 6.2.18 The WoE Economic Development Needs Assessment (WoE EDNA) 2016 was prepared by Atkins to assess the employment land demand and supply characteristics and trends for the WoE, which is identified as a Functional Economic Market Area (FEMA). The study identifies sub-areas that contain similar supply and demand characteristics. The closest to the Project Site are the Avonmouth-Severnside and North East Bristol sub-areas.
- 6.2.19 The study reports that across the WoE current levels of supply are sufficient to meet demand to 2036; with Avonmouth-Severnside providing potential for large traditional industrial uses (such as industrial, logistics and utilities) and North East Bristol which includes Filton, Emersons Green and Aztec West.
- 6.2.20 The study also notes that beyond the key sub-areas, there is also a generic typology that appears across the region; which comprises mixed business spaces for firms which serve local markets. Thornbury is identified as a key location for this employment space noting that 19ha of land is allocated for this use within the SGC Core Strategy.

Local Planning Policy

Current Planning Policy

- 6.2.21 Current planning policy for South Gloucestershire comprises the Core Strategy (adopted 2013) and the Policies, Sites and Places Plan (adopted 2017). The Core Strategy sets the strategic development context for the plan area for the period 2006-2027.
- 6.2.22 In the 2013 Core Strategy, the approach to the development of Thornbury is to revitalise the town centre and strengthen community facilities and services (para 4.24). Two allocations for a total of approximately 800 new homes are identified for Thornbury which are both committed schemes identified in Table 5.3 at Park Farm and Morton Way North. There are a number of objectives for Thornbury over the plan period, including a new sixth form centre for the Castle School, which brings together education provision on a single site and supports existing primary schools, and to strengthen community health facilities in the town.
- 6.2.23 The following policies from the Core Strategy are noted for the purposes of this socio-economic assessment:

CS4A: Presumption in Favour of Sustainable Development: SGC will take a positive approach when considering proposals for sustainable development, and will work pro-actively with applicants to find solutions so that sustainable development can be approved wherever possible. The policy repeats the now withdrawn paragraph 14 of NPPF (2012).

CS5: Location of Development: New development within Thornbury will be of a scale appropriate to revitalise the town centre and strengthen community services and facilities.

CS6: Infrastructure and Developer Contributions: SGC will work with partners to deliver infrastructure, services and community facilities to improve the sustainability of its communities. All development of a sufficient scale that would add to the overall demand and impact on infrastructure will be required to provide:

- Site specific measures to directly mitigate the impact of the development
- Infrastructure, services and community facilities to mitigate its impact on existing communities and provide for the needs arising from the development;
- Where not provided on site, financial contributions will be sought.

CS11: Distribution of Economic Development Land: 19ha of land for economic development is identified for safeguarding in Thornbury.

CS14: Town Centres and Retailing: Thornbury's town centre is identified as a Market Town; with development of main town centre uses directed to locations as such Thornbury's town centre reflecting the scale and function of that settlement.

CS15: Distribution of Housing: between 2006-2027, a minimum of 28,355 new homes will be delivered in South Gloucestershire.

CS17: Housing Diversity: new housing development comprising both market and affordable, must provide a variety of housing types and sizes to accommodate different households.

CS18: Affordable Housing: developments over 10 dwellings should provide 35% affordable housing onsite.

CS23: Community Infrastructure and Cultural Activity: the council will work with partners to provide additional, extended or enhanced community infrastructure. New developments will be required to provide, or contribute towards, infrastructure where it would generate a need for such facilities through 1. Enhance existing facilities which are within easy walking distance of the development, or 2. Provide adoptable multi-use buildings on site in easily accessible locations for pedestrian and cyclists.

CS24: Green Infrastructure, Sport and Recreation Standards: new developments should provide green infrastructure to meet the projected needs arising from the future occupiers. Appendix 5 includes SGC's green infrastructure, sport and recreation standards:

Table 6.1: Green Infrastructure, Sport and Recreation Standards

Category	Definition	Quantity Standard / 1,000 pop.	Accessibility Standard
Informal Recreational Open Space	Includes parks, public gardens, amenity green spaces and green corridors	1.4ha	12.5min walk / 600 metres
Natural and Semi- Natural Green Space	Areas of green space where the primary purpose is one of wildlife and biodiversity conservation and value	1.5ha	15min walk/ 720 metres
Outdoor Sport Facilities	Includes all outdoor sports facilities whether naturally or artificially surfaces including playing pitches, MUGAs	1.6ha	20min walk/ 1,000 metres – playing pitches 22min drive – synthetic pitches, athletics tracks, golf courses
Provision for children and young people	All equipped areas for play, including provision for young people (ie shelters, skate parks)	0.25ha	10min walk / 480 metres – children play space 15min walk / 720 metres – young people provision
Allotments		0.2ha	15min walk / 720 metres

CS32: Thornbury: development in Thornbury could take account of the vision and priorities of partners, including: secure better use of Thornbury's network of open spaces; support opportunities to retain and enhance the arts, cultural and community provision; promote the development of high quality housing and infrastructure; support the continued excellence, viability and quality of all the education provision, and seek to increase pre-school nursery provision; and maximise opportunities for sustainable travel.

PSP11: Transport Impact Management: sets out key services and facilities which SGC consider would ideally be in walking/cycling distance (distance as the crow flies):

Table 6.2: Walking/Cycling Distances too Key Services and Facilities

Key Service/Facility	Appropriate Walking/Cycling Distances
Retail (comparison) shops and services Or Market Town Centres	
Weekly Superstore/Supermarket	1,200m
Day to Day Convenience Shops	
Local Health Services/Pharmacy	
Community Centre	800m
Post Office	800111
Public Houses	
Secondary School	3miles
Primary School	2miles
Major Employers (designated employment land or Town Centres)	2,000m

Other Relevant Policy/Guidance

Affordable Housing and Extra Care Housing SPD

- 6.2.24 This SPD (May 2014) forms a material consideration in the determination of planning applications. The policy does not identify specific affordable housing provision but re-affirms the Core Strategy requirement for 35% affordable housing without public subsidy.
- 6.2.25 On large sites where development will be phased, it is expected that the affordable housing will be developed at the same time as the market housing, and be well-integrated with neighbouring market housing.
- 6.2.26 The size and mix of affordable dwellings to be provided on site will depend on housing need and provide a suitable mix of house types and sizes which will be spread across the range of unit types and sizes.

Community Infrastructure Levy Regulation 123 List

6.2.27 SGC implemented their CIL Charging Schedule in March 2015, and a CIL Regulation 123 List took effect in August 2015 (subsequently updated in September 2018), which sets out the projects to which CIL funding will be allocated. This is supplemented by a 'Community Infrastructure Levy & Section 106 Planning Obligations Guide' (SPD, March 2015) – discussed below. The projects relevant to this assessment are set out in Table 6.3 below.

Table 6.3: Selected Community Infrastructure in the Regulation 123 List

Regulation 123 List: Community Infrastructure Levy	Exceptions (to be delivered through planning obligations)
Primary school places	New primary schools required onsite to serve CPNN & EoHS NN NIL CIL Zones.
Secondary school places	New secondary school required onsite to serve CPNN NIL CIL Zones & financial contribution towards extension of a local secondary school from EoHS NN £NIL CIL Zone.
Nursery facilities	Onsite facilities or in-kind or financial contribution required to serve CPNN & EoHS NN £NIL CIL Zones.
Youth facilities	Onsite facilities or in-kind or financial contribution required to serve CPNN & EoHS NN £NIL CIL Zones.
Community meeting spaces	Onsite facilities or in-kind or financial contribution required to serve CPNN & EoHS NN £NIL CIL Zones.
Libraries	Onsite facility required to serve CPNN NIL CIL Zones. Financial contributions or in kind provision towards the improvement a local library from EoHS NN £NIL CIL Zones.
Health and social care facilities	New onsite or local offsite facility or extension of local facility(ies) required to serve CPNN & EoHS NN £NIL CIL Zones.
Indoor leisure facilities & centres	Onsite facility required to serve CPNN £NIL CIL Zones & onsite facilities or in-kind or financial contribution required to improve a local facility from EoHS NN NIL CIL Zone.
Museum or heritage asset	[intentionally blank]

^{*}Note the strategic allocations in the 123 List are set out as Cribbs/Patchway and East of Harry Stoke

6.2.28 The Proposed Development is not identified as a strategic allocation in the Regulation 123 List, and as such is not identified as an Exception. Therefore the CIL collected from the Proposed Development (current CIL rate at £80/m² plus indexation) would be directed to the infrastructure in the left hand column of Table 6.3.

Community Infrastructure Levy & Section 106 Planning Obligations Guide (March 2015)

6.2.29 This SPD was adopted in March 2015, and provides general background to the implementation of CIL, and the relationship with s106 planning obligations. It confirms that the types of obligations via S106, which SGC may seek include local transportation & highway works, public open space and landscaping, and other site specific measures (such as education, community buildings, health facilities, ecology, heritage, public rights of way and public art).

Draft Indoor and Built Sport Facilities Strategy (January 2018)

6.2.30 This document was published for consultation in early 2018, but has yet to be finalised and published. The report utilises the Facilities Planning Model (FPM) produced by Sport England. The FPM reports that Thornbury's sports hall and swimming pool currently operate at 34% capacity. This therefore has significant spare capacity, which could support new housing growth. Health and fitness provision currently stands at just over 100 stations, which would need to be reviewed in light of population growth.

Infrastructure Delivery Plan (2014)

6.2.31 The Infrastructure Delivery Plan (IDP; March 2014) forms part of the evidence base supporting the adopted Core Strategy, and brings together a range of infrastructure evidence and research. It suggests standards for a range of social infrastructure for new development; those in Table 6.4 are considered relevant here:

Table 6.4: Standards for Social Infrastructure

Issue	Standard
Youth Services	25 young people per 100 dwellings Uptake of services at 30%
Health Services	1 GP per 1,700 people. In cases where up to 2 or 3 additional GPs are required it is likely that an existing practice will be extended rather than a new practice constructed.
Libraries	30sqm per 1,000 people
Community Centres/Village Halls	0.14sqm/person (anticipates each community centre would serve 4,000 people) and a minimum of 575sqm per new centre.

Baseline Data Collection

- 6.2.32 The baseline conditions of the Study Area are provided and this is compared to the wider subregional (West of England) and national conditions.
- 6.2.33 Baseline information on the socio-economic conditions of the area has been collated from a variety of sources including:
 - National Census (2001) and (2011) and other ONS-produced sources
 - NOMIS labour market statistics
 - Indices of Multiple Deprivation
 - South Gloucestershire Core Strategy (2013), and associated evidence base
 - Emerging West of England Joint Spatial Strategy (2017), and associated evidence base
 - NHS Bristol, North Somerset and South Gloucestershire Clinical Commissioning Group (CCG)
 - NHS Choices (2018)
 - Get information about schools (2018).

Assessment Methodology

- 6.2.34 This section presents the approach to the assessment of socio-economic impacts of the Proposed Development, consistent with the Scoping Opinion and Town and Country Planning EIA Regulations. The stages of the methodology include:
 - Review of public policy review relevant public policy to establish the baseline of community expectations for the Proposed Development.
 - Define socio-economic baseline conditions including a review of existing the demographic and economic profile of the local population, local housing need, and identify relevant social infrastructure (education, health, open space, community facilities) and any spare capacity.
 - Impact assessment considering the nature, scale and permanence of the potential impacts on the relevant impact areas during both the construction and operational phase of the Proposed Development, and also discusses proposed mitigation measures where there are any adverse effects.
 - Cumulative impacts and residual impacts.
 - Summary of impacts.
- 6.2.35 The following sections provide further detail regarding the assessment of socio-economic impact assessments.

Impact Areas

- 6.2.36 The concept of a primary area of influence or study area is standard in EIA practice, however there is no standard measure. For socio-economic impact assessments this is further complicated by the mobility and network of potential receptors. We have considered the socioeconomic impacts across a number of geographic scales:
 - Walkable Impact Area
 - Thornbury Impact Area
 - Secondary School Impact Area
 - South Gloucestershire Impact Area
 - West of England Impact Area
- 6.2.37 These are explained below.

Walkable Impact Area

- 6.2.38 The Project Site would be an urban extension to Thornbury on its north-western approach. It is surrounded by agricultural land to the north, south and west, with new residential development at its eastern boundary at Park Farm. The Project Site is irregularly shaped but is generally 650m across in both east-west and north-south directions. The aim of the proposals is to ensure that there are a mix of land uses and social infrastructure to help create walkable neighbourhoods within the Project Site boundary as much as feasible for the population size.
- 6.2.39 The Walkable Impact Area is the walkable catchments in and around the Site. The guidance (Manual for Streets (DfT, 2007) states that journeys up to 2km could be considered suitable for walking (see Section 3.5 Transport Assessment). Where social infrastructure is not accessible within Project Site, we explore the accessibility of other social infrastructure within 2km, where the journey would be safe for pedestrians. This means following the proposed Sustainable Travel Link through the Park Farm site to Alexandra Way, towards Thornbury town centre, see Figure 6.1.

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The Site

Thornbury

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Figure 6.1 Walkable Impact Area

Source: Google Maps, accessed August 2018

6.2.40 This approach is consistent with paragraph 10.83 of the Core Strategy, which states

'Where new development creates additional need, the starting point should be to seek to enhance the role and viability of existing [community and cultural infrastructure] facilities that are within easy walking distance of the new development. Should this not be possible or appropriate, adaptable multi-use buildings should be provided onsite, in easily accessible and visible locations at the heart of the community it is intended to serve.'

- 6.2.41 We assess the following social infrastructure in the Walkable Impact Area:
 - Early years provision/child care facilities
 - Primary school education
 - · Child play space
 - Passive open space

Thornbury Impact Area

6.2.42 For social infrastructure that requires more infrequent access, such as playing pitches, primary healthcare facilities, and community centres, we consider that residents would be willing to travel further than a walkable catchment, and consider facilities across the Thornbury urban area. Most of these are in and around Thornbury town centre, which is itself within the walkable catchment from the Project Site.

Secondary School Impact Area

6.2.43 People typically travel further for secondary school education and further education. The average distance travelled to secondary schools in the South West was 3.9 miles (6.2 km) in the National Travel Survey (2014/15; Table NTS9908). This forms our Secondary School Impact Area, see Figure 6.2.

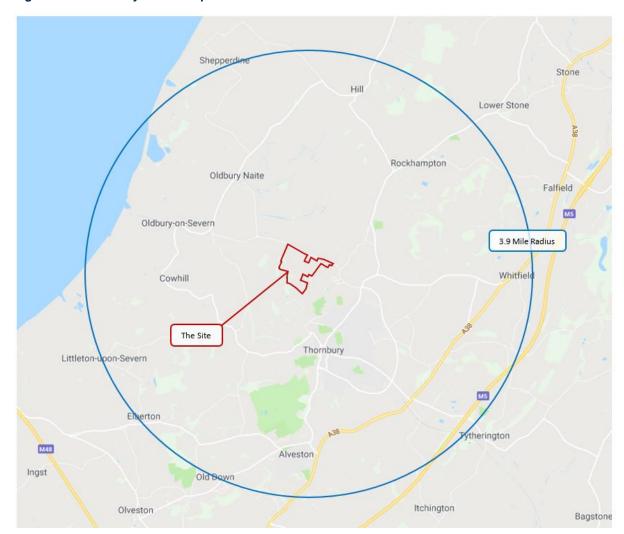


Figure 6.2: Secondary School Impact Area: 3.9 miles

Source: Google Maps, accessed August 2018

South Gloucestershire Impact Area

- 6.2.44 Housing market areas do not usually conform to local authority boundaries.
- 6.2.45 The Wider Bristol Housing Market Area Strategic Housing Market Assessment (SHMA; 2015) identifies that South Gloucestershire is part of the Bristol Functional HMA, see Figure 6.3.



Figure 6.3 Bristol Functioning Housing Market Area & West of England Sub-region

Source: Wider Bristol HMA Strategic Housing Market Assessment (2015).

6.2.46 The emerging JSP disaggregates this research into housing targets for local authority areas, including South Gloucestershire. Therefore this is considered the relevant geography to assess the effects of new housing supply.

West of England Impact Area

6.2.47 We assess the employment generating impact of the construction and operational phases of the Proposed Development at the sub-regional level for West of England, consistent with the FEMA identified by the Local Enterprise Partnership. This is represented by the red line boundary in Figure 6.3.

Temporal Scope

- 6.2.48 The temporal scope for the assessment has considered the length of the construction phase, and is used to consider temporary and permanent impacts of the operational phase of the Proposed Development. The temporal scope includes:
 - Short term generally identified as temporary impacts lasting 0-5 years and mainly as
 a result of the construction phase (short term effects could be felt over a sustained
 period of time as construction would be phased over 8 years while the development is
 built out)
 - Medium term 5-15 years
 - Long term permanent impacts during operational phase of the Proposed Development.

Cumulative Impacts

6.2.49 The ES sets out a number of cumulative developments within Chapter 5 (Table 5.3) and this Chapter assesses, at a high level, their likely cumulative impact on the assessment.

Significance Criteria

- 6.2.50 The assessment of impact significance has been undertaken utilising the Effect Significance criteria presented in Chapter 5. The level of significance applied to an effect has been determined using professional judgment. The assessment has aimed to be objective and to quantify effects, where possible. Where quantification has not been possible, qualitative assessments have been made and justified.
- 6.2.51 In terms of the describing the duration of effect, short to medium-term effects are considered to be those associated with the site preparation and construction phase and long-term impacts are those associated with the completed development.
- 6.2.52 Effects are defined as either:
 - Beneficial an advantageous impact on the impact area
 - Neutral neither negative or positive impacts on the impact area
 - Adverse detrimental impacts on the impact area
- 6.2.53 Beneficial and adverse effects are based on a standard set of significance criteria defined as follows:

- Negligible
- Minor
- Moderate
- Major
- Substantial
- 6.2.54 The scale of effect is determined with reference to planning policy, best practice guidance and relevant contextual factors. For example, employment generation of 100 new jobs could be considered a major beneficial effect in a settlement of 1,000 residents, but it would be a less significant effect in a larger settlement of 100,000 residents. Effects that are of moderate or major significance are considered to be significant in EIA terms.
- 6.2.55 Effect significance is assigned to residual impacts, post mitigation.

Assumptions and Limitations

- 6.2.56 By the nature of the methodology, estimates of change in the socio-economic elements such as economic and employment impacts are subject to uncertainty. The estimates in this chapter are based on good practice, but there would likely be a degree of uncertainty around estimates.
- 6.2.57 We estimate that actual impacts are likely to be in a range of +/- 20% of figures given to account for this uncertainty, as is standard practice with such matters.
- 6.2.58 The assessment of spare capacity in social infrastructure is relatively high-level, in proportion to the availability of data and experience in other, similar contexts. More detailed assessment may be necessary upon further review with service providers.

6.3 CONSULTATION

6.3.1 The scope of this assessment was submitted to SGC in the EIA Scoping Report. Comments from SGC were received through their Scoping Opinion, and these have been taken into account in the undertaking of this assessment – see Section 6.2.2 above.

6.4 BASELINE ENVIRONMENT

6.4.1 This section provides details on the existing conditions in Thornbury and relevant impact areas. Where appropriate, conditions are framed in the context of sub-regional (West of England), regional (South West) and national standards for context.

- 6.4.2 The baseline is structured around the following subjects. These provide the context for the impact assessment:
 - Population demographics
 - Economic profile
 - Deprivation
 - Housing need; and
 - Social Infrastructure (schools, primary health care facilities, open space).
- 6.4.3 In summary, the baseline conditions identify that:
 - In 2011 there were 12,063 people living in Thornbury with an average household size of 2.3.
 - The population of South Gloucestershire is forecasted to grow at a faster rate over 2016-2036 than England and the South West.
 - The population of South Gloucestershire is projected to age, with 35% growth in those aged 60 or over. Compared to changing age structures in the South West, South Gloucestershire is projected to have a higher growth in the number of young people (0-19 years) and working age population (20-59 years).
 - Unemployment rates in the West of England were 3.9% in 2018, below the England average.
 - Professional services and administration & support are expected to drive employment growth between 2015 and 2036, adding 16,000 and 12,000 new jobs respectively.
 - Thornbury is not generally a deprived area. The area on the north-western fringe of the town, close to the Proposed Development, is amongst the least deprived of the areas.
 - Since 2013, there has been an average of 1,264 net new dwellings per annum (four years 2013/14 to 2016/17) completed in South Gloucestershire, 20% below the annual target in the Core Strategy, with a cumulative deficit of 1,384 new dwellings since 2013/14.
 - There are four pre-schools within a walkable catchment of the Proposed Development, however, spare capacity is unclear given the nature of pupil place reporting in early year provision.

- There are six comprehensive-admission primary schools within a walkable catchment
 of the Proposed Development. By 2020 there is projected to be 78 spare places in the
 planning area that includes Thornbury.
- There are two comprehensive-admission secondary schools within the 3.9 mile radius
 of the Proposed Development. By 2024/25 there is projected to be 2,446 pupils in the
 3,117 places in the School Planning Area for The Castle School and Marlwood School.¹
- There are three GP surgeries in Thornbury. Streamside GP surgery appears to have spare capacity.
- There is one dental practice with two dentists offering NHS services in Thornbury. They
 are serving a larger population than the national average.
- In the 2010 Open Space Audit Thornbury had less open space for young people and children, allotments and natural and semi-natural green space than the local standards. It had slightly more informal recreation space than the standard. There are four passive open spaces within a walkable catchment of the Proposed Development.
- In the 2018 Draft Playing Pitch Strategy and Action Plan Thornbury there is a shortfall
 of one full sized 3G artificial grass pitch and some spare capacity in adult and junior
 football pitches and adult rugby pitches.
- There are five community meeting spaces in Thornbury. The draft Indoor and Built Sports Facilities Strategy identifies significant spare capacity at sports halls in Thornbury.

Population Demographics

- 6.4.4 The 2011 Census reports that the population of Thornbury was 12,063 persons² in 5,204 dwellings. This is an average of around 47 residents per hectare, 20 dwellings per hectare, and an average household size of 2.3 residents. The working population (persons aged 16-64) was 7,385 (61.2% of the total population).
- 6.4.5 The ONS sub-national population projections (2016) forecast the population of England to grow by 5.4 million (9.8%) from 2016 to 2036 (the plan period of the emerging JSP). The South West region is projected to increase by 648,000 people, which is a faster rate than for England at

Environmental Statement Land to the West of Park Farm, Thornbury

¹ DfE School Capacity data May 2018 (SGC forecasts) Thornbury & Alveston School Planning Area

² At the Output Area level consistent with the built form.

11.7%. In South Gloucestershire, the projections are higher still, at 17.4% new residents by 2036 (+48,200).

Changing Age Structure

6.4.6 Figure 6.4 shows the changing demographic profile for South Gloucestershire in the context of the South West region and England. It shows an ageing population within South Gloucestershire, with over 35% growth in the proportion of those aged 60 or over. The projections for South Gloucestershire and the South West are consistent with those for England in this trend. Other notable points are that the proportion of younger residents in South Gloucestershire (+16%) is projected to be significantly higher than the South West (+6%) or England (+4%). Similarly, the proportion of working age population (20-59) is projected to increase by +19% compared to +1% for both the South West and England (the range 20-59 does not capture the full proportion of working age population but it captures the large majority).

1.4 1.3 1.2 1.1 0.9 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 England 0-19 England 20-39 England 40-59 England 60+ South West 0-19 South West 20-39 South West 40-59 South West 60+ ——South Gloucestershire 0-19 South Gloucestershire 20-39 —— South Gloucestershire 40-59 —— South Gloucestershire 60+

Figure 6.4 Projections in age structure, South Gloucestershire, South West and England, 2016-2036

Source: ONS Population Projections, 2016

Economic Profile

6.4.7 Each quarter the WoE LEP publishes an Economic Bulletin and Barriers to Growth Survey³ ('the Bulletin'). This provides economic baseline data for the sub-region. At the time of writing (August 2018) the most recent issue is for the 2nd quarter of 2018.

Employment

- 6.4.8 The Bulletin states that the WoE employment rate in the year to June 2018 stood at 78.7%. The WoE has a higher economic activity rate than that of England as a whole and the average of comparator Core City LEP areas.
- 6.4.9 Unemployment rates within the WoE for the working age population (16-64) in the year to June 2018 stood at 3.9%, which is slightly higher than the previous year at 3.8%. The unemployment rate for the WoE remains below the rate for England and the average Core City LEP areas.
- 6.4.10 Data for employment and unemployment in Thornbury is available from the 2011 Census (it is reported more recently at the regional and national levels). This shows that 6,125 people were considered economically active in 2011, which represents 51% of the resident population.

Claimant Rate

6.4.11 As of June 2018, the LEP's Bulletin reports the claimant rate in the WoE stood at 1.6%. This was an increase of 0.2% from April 2017. The WoE continues to follow national trends with the claimant rate for the WoE being 0.6% lower than it is for England. There has been a slight increase in the number of claimants within the WoE, although it is acknowledged that pockets of long-term unemployment in the WoE remain.

Economic Growth

6.4.12 Oxford Economics, on behalf of the LEP, produced a series of potential growth forecasts for the WoE⁴ from 2013 to 2015 which summarised the outlook for the WoE sub-region, focusing on demographic and labour market developments, including comparisons with the UK economy. The report of 2015 states that of the 634,000 jobs in the WoE LEP area in 2014, services are the dominant employers in the region, providing 86% of jobs. The largest sectors in the region are healthcare, wholesale and retail, employing 89,000 (14.0%) and 86,000 (13.5%) people

³ https://www.westofengland-ca.gov.uk/about-us-2/

⁴ http://westofenglandlep.co.uk/about-us/economic-intelligence/growth-forecasts

- respectively. Relative to the UK, the South West has a significant concentration of jobs in the accommodation and food, healthcare and construction sectors.
- 6.4.13 Oxford Economics predicts that total employment in the WoE is estimated to increase by 10,000 additional jobs in 2015, equivalent to growth of 1.5% (comparing favourably to growth in the South West of 1.1% and UK of 1.4% in the year). This growth was predicted to slow over the long run as demographic developments, most notably a slowdown in the growth of working age population, become less supportive of employment growth..
- 6.4.14 Total jobs in the sub-region are forecast to reach 697,000 people by 2036, an increase on current (2015) levels by some 53,000 jobs. Professional services and administration & support are expected to drive employment growth between 2015 and 2036, adding 16,000 and 12,000 new jobs respectively. Also construction and healthcare are forecast to contribute significantly to employment growth, creating an additional 9,500 and 9,100 jobs respectively..
- 6.4.15 As part of submissions to the emerging JSP, updated growth projections have been published by third parties. The West of England: Housing and Economic Review Update (Barton Willmore, January 2018) utilises the 2017-based Oxford Economic forecasts which projects an increase in job growth of between 70,798 144,545 jobs over the period 2016-2036: compared to the 2015-based projections of between 48,971 115,121 jobs.

Existing Employment

6.4.16 The Project Site currently comprises agricultural land. Existing employment is considered to be negligible in the context of the Proposed Development.

Deprivation

- 6.4.17 The Ministry for Housing, Communities and Local Government (MHCLG) publish the English Indices of Deprivation to measure relative deprivation in communities across the country. The latest indices were released in 2019. A measure is provided for every local authority and lower super output area (LSOA) in England and allows areas to be ranked accordingly to how deprived they are relative to each other.
- 6.4.18 The indices consider a range of indicators, and a household is considered deprived if they meet one or more of the following conditions:
 - Employment: any member of a household not a full-time student is either unemployed or long-term sick
 - Education: no person in the household has at least level 2 education (see highest level of qualification), and no person aged 16-18 is a fulltime student

- Health and disability: any person in the household has general health 'bad or very bad' or has a long term health problem, and
- Housing: Household's accommodation is ether overcrowded, with an occupancy rating
 1 or less, or is in a shared dwelling, or has no central heating.

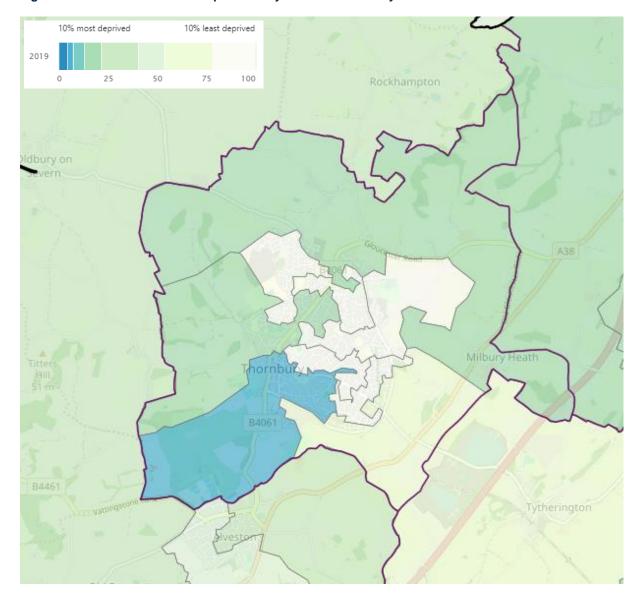


Figure 6.5 Extract of Indices of Deprivation by LSOA in Thornbury

Source: MHCLG, Indices of Deprivation 2019 Explorer http://dclgapps.communities.gov.uk/imd/iod_index.html

6.4.19 At a local authority level, South Gloucestershire is ranked at 267 of 317 Local Authorities in England, so is within the 20% least deprived local authorities in England. The other local authorities which make up the West of England vary significantly as North Somerset ranks 221, Bath & North East Somerset ranks 274 and Bristol ranks 82.

6.4.20 Figure 6.5 shows that the Lower Super Output Areas that make up Thornbury are amongst the middle to lower deprived areas in the country, i.e. it is not generally a deprived area. LSOA South Gloucestershire 002B is the most deprived of the LOSAs. This area covers the High Street and residential area to the south of Thornbury. It is ranked 11,707 out of 32,844 LSOAs in England; where 1 is the most deprived LSOA. This is amongst the 40% most deprived neighbourhoods in the country. The LSOA on the north-western fringe of the town, close to the Project Site, is amongst the least deprived of the areas.

Housing Need

- 6.4.21 The LEP's Bulletin states that the main and continued area of concern for the WoE is the rising unaffordability of house prices and rents in the area. It notes that, whilst growing house prices is a positive sign of an area's economic health, it also presents serious challenges. As of September 2019 average house prices in South Gloucestershire were £282,032; exceeding the maximum cap on a Help to Buy Individual Savings Account of £250,000. This represents an increase from £278,851 in the 11 months since October 2018 (Source: Land Registry).
- 6.4.22 The LEP considers that house prices could present a constraint to economic growth if workers cannot afford to live in the area. Increasing house prices and rents can contribute to rising homelessness, decreased social mobility and could potentially lead to a rising benefit bill.
- 6.4.23 Opinion Research Services (OSR) investigated the strategic housing market areas (SHMAs) within the sub-region and identified two distinct housing markets: the Bristol Functional HMA which covers the combined area of Bristol, North Somerset and South Gloucestershire and the Bath Functional HMA (June 2016). The Bristol Functional HMA is relevant to this assessment.
- 6.4.24 The Wider Bristol SHMA (ORS, April 2018) identifies an objectively assessed need (OAN) of 87,000 dwellings for the Functional Bristol HMA from 2016-36; and alongside the OAN for Bath, a total OAN for the JSP plan area has been identified at 101,300 dwellings. Of these figures, there is a need for an additional 32,200 affordable homes: 26,900 dwellings in the Wider Bristol HMA and 3,300 dwellings in Bath. The JSP's 'Affordable Housing Topic Paper (April 2018)' indicates that the breakdown of this affordable housing need for South Gloucestershire is 5,987 units, and 16,228 units for the City of Bristol. The draft JSP confirms that it will not meet the West of England's affordable housing need.
- 6.4.25 The emerging JSP, and associated OAN, is subject to significant objection from the local business and development community. Submissions have been made to propose alternative housing need assessments based on more updated economic projections, and seeking to better address affordability concerns in the region. They indicate an OAN for the JSP plan area, of a

minimum of 132,000 dwellings (Business West⁵) and a minimum of 140,000 dwellings (consortium of house builders⁶).

6.4.26 The proposed housing target for SGC in the emerging JSP, at 32,500 dwellings, represents an annual requirement of 1,625 dwellings. This is similar to the Core Strategy (2013) target of 1,610 new dwellings per annum 2013-2027. Between 2013/14 and 2017/18 (the date of the latest Annual Monitoring Report on the SGC website), there has been an average of 1,331 net new dwellings per annum (four years 2013/14 to 2017/18)⁷ completed in South Gloucestershire, 17% below the annual target in the Core Strategy, with a cumulative deficit of 1,395 new dwellings since 2013/14.

Social Infrastructure

Education

- 6.4.27 The South Gloucestershire Education Partnership represents all schools and other education providers in the region. It was formed in June 2014 and is responsible and accountable for the quality of education and learning outcomes. South Gloucestershire Council is the education and children's services authority responsible for securing sufficient provision for their area. The DfE uses an assumed 2% margin of surplus places for each age cohort across a School Planning Area when assessing whether additional capacity is necessary. This is to allow for in-year pupil movement and a measure of expressions of parental preference of school.
- 6.4.28 The baseline assesses the current capacities of education facilities that could be accessed by residents of the Proposed Development. It also sets out forecasts of future demand where available.

Pre school

6.4.29 Figure 6.6 shows the location of pre-school facilities within the Walkable Impact Area from the Project Site. We also note facilities on the edges of the impact area, as it is not a hard boundary.

⁵ Housing Numbers for the West of England: Further Analysis and Commentary on the West of England Joint Spatial Plan, Prof Glen Bramley; Institute for Social Policy, Housing, Equalities Research, Heriot-Watt University, Edinburgh on behalf of Business West, Dec 2016.

⁶ Objective Assessment of Housing Need for West of England, Barton Wilmore on behalf of Barratt, Bloor Homes, Bovis Homes, Crest Nicholson, Gallagher Estates, Gladman, Persimmon, Redrow, Richborough Estates and Taylor Wimpey, Dec 2017.

⁷ South Gloucestershire Authority Monitoring Report, 2018.

- 6.4.30 Rainbow Teddies pre-school is the one of three early years childcare facilities within the Walkable Impact Area. The pre-school operates within Manorbrook Primary School and provides education through play for children aged 2.5 4 years old. Rainbow Teddies was rated 'outstanding' by Ofsted in 2015. Ofsted recorded a capacity of 36 places, with a current roll of 49 children.
- 6.4.31 Little Acorns & Stepping Stones Nursery and Pre-school provides early years education and care for babies through to pre-schoolers. It was rated as 'good' by Ofsted in 2016. Ofsted recorded a capacity of 112 places, and a roll of 130 children.
- 6.4.32 First Step Pre-school at Christ The King Catholic Primary School was last inspected by Ofsted in 2015. The pre-school was rated 'outstanding'. At the date of inspection, 36 children were on the roll and there was a capacity of 22 places.
- 6.4.33 There is a second First Step Pre-school located just outside the Walkable Impact Area operating as part of Crossways Infant School. The pre-school at Crossways was inspected in 2017 and received a rating of 'good'. At the time of review the school had capacity of 20 places and 38 children on the roll.



Figure 6.6 Early years and Primary Education Facilities

Source: Savills, Google maps, accessed August 2018

6.4.34 All of the early years education facilities within Thornbury have more children listed on their rolls than the recorded maximum number of places. At this age children attend pre-school facilities across a range of hours, with all 3 and 4 year olds eligible for 15 hours of free childcare. Some two year olds are also eligible for 15 hours and some 3 and 4 years olds are eligible for 30 hours subject to conditions. Therefore there is not a direct link between the number of children registered and the number of places available.

Primary Schools

6.4.35 As shown in Figure 6.6, there are four comprehensive-admission primary schools located within the Walkable Impact Area, and two located just outside which are Crossways Infant and Junior School. All are included in Table 6.5 below.

Table 6.5 Primary Schools Within Walkable Impact Area

School	Distance (straight line)	Age Range	Capacity	No. On Roll	Spare capacity: >8% surplus
Manorbrook Primary School	0.9km	4-11	210	205	5
St Mary's CofE Primary School	1km	4-11	210	215	-5
Gillingstool Primary School	1.9km	4-11	210	161	49
Christ The King Catholic Primary School	1.5km	4-11	180	170	10
Crossways Infant School	2km	5-7	180	155	25
Crossways junior School	2km	7-11	240	230	10
Total			1,230	1,136	94

Source: DfE PLASC Data January 2019

- 6.4.36 Most of the primary schools are close to capacity with 7.64% places overall. There is spare capacity of approximately 74 places at Gillingstool Primary and Crossways Infant schools.
- 6.4.37 For pupil place planning, South Gloucestershire divides the primary schools into seven planning areas. Thornbury is part of Area 1, alongside Severnside, Almondsbury and surrounding villages (a total of 14 schools). The 2018 School Capacity Forecasts (UD2) forecasts that the number of primary school pupils in Area 1 is expected to decrease from 2,517 (actual 2017/18) to 2,394 for 2022/23, net of new housing. That is by 4.9%, or by 123 places in the period due to the drop in births in the area.
- 6.4.38 Reception admissions forecasts are important for understanding the likely number of places needed in the coming years. Table 6.6 replicates information in the Commissioning of Places Strategy, SGC (2016), setting out projections of the reception year cohort in Area 1:

Table 6.6 Primary Schools Pupil Projections for Reception Starters in Area 1

	2018	2019	2020	2021	2022
Pupil Projection	324	348	308	287	305
Total number of Places (Total Capacity)	405	405	405	405	405
No. of Surplus Places	81	57	97	118	100
Percentage Surplus	20	14.1	24	29.1	24.1

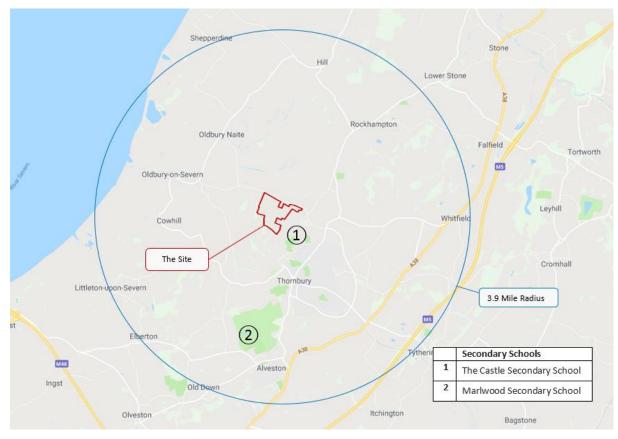
Source: DfE School Capacity Data (UD2) May 2018

6.4.39 Based on known births in the area and patterns of net migration, Table 6.6 above indicates that the numbers of pupils starting reception in Area 1 is forecast to vary year-on-year but there is still some spare capacity in the system, net of new housing throughout the period. A limitation of this data is that it is not disaggregated by school, so it is not possible to set out whether there is spare capacity in the primary schools within the Walkable Impact Area and provision for a further primary school within the development is allowed for.

Secondary Schools

6.4.40 Figure 6.7 shows the location of comprehensive-admission secondary schools with the Secondary School Impact Area.

Figure 6.7 Secondary Schools within Secondary School Impact Area



Source: Savills, Google maps, accessed August 2018

- 6.4.41 There are two comprehensive-admission secondary schools within the 3.9 mile radius of the Project Site. The nearest of the two is the Castle School located in Thornbury which received an Ofsted rating of 'good' in 2016. The second school is Marlwood which is situated to the south of Thornbury and is currently operating at less than half of its capacity. This is likely due to the school currently performing poorly, with 2017 Ofsted deeming the school as being 'inadequate' across most categories in 2017.
- 6.4.42 The capacity and roll of the two secondary schools are listed in Table 6.7 below. Note this data includes post-16 places (Years 12 and 13).

Table 6.7 Secondary Schools within Secondary School Impact Area

School	Distance (straight line)	Capacity	No. On Roll (Jan 2019)	Spare capacity:
The Castle	0.9km	1,733	1,654	79
Marlwood	3.4km	1,384	635	749

Source: DfE School Capacity Data (UD2) May 2018

6.4.43 Table 6.7 shows that there is spare capacity of 749 places at Marlwood secondary school. For pupil place planning, South Gloucestershire divides the secondary phase schools into five planning areas. Thornbury is part of Group 1, with Alveston (2 schools). This is consistent with the two schools in the Secondary School Impact Area. The secondary school pupil forecasts to 2024 for Group 1 are set out in Table 6.8 below..

Table 6.8 Secondary School Pupil Projections for Group 1, 2018-2022.

	2018	2019	2020	2021	2022	2023	2024
The Castle and Marlwood	2,140	2,188	2,210	2,264	2,332	2,393	2,446

Source: DfE School Capacity Data (UD2) May 2018

- 6.4.44 Table 6.8 shows that the number of secondary school pupils at the Castle and Marlwood is forecasted to increase by 306 children, or 14.2%, by 2024. This is lower than the average for South Gloucestershire which has a forecasted increase of 19% by 2022.
- 6.4.45 The pupil projections for the first year of admission at secondary school (Year 7) are important to understand the likely number of places needed in the coming years. The number of new secondary school starters forecasted for the Castle and Marlwood 2018-2022 are set out in Table 6.9.

Table 6.9 Secondary School Year 7 Pupil Projections, the Castle and Marlwood, 2018-2022

	2018	2019	2020	2021	2022	2023	2024
Pupil Projection	367	392	396	409	418	427	420
Total Number of Places	480	480	480	480	480	480	480
Surplus Places	113	88	84	71	62	53	60
% Surplus margin	23.5	18.3	17.5	14.8	12.9	11	12.5

Source: DfE School Capacity Data (UD2) May 2018

- 6.4.46 Table 6.9 above shows that the number of year 7 starters at the Castle and Marlwood is expected to increase but not to the extent that the number of pupils across both secondary schools in the area will have surpassed the capacity.
- 6.4.47 The forecasts for the area as regards post-16 pupils in the two schools decrease from 352 (actual) 2017/18 to 331 (2018/19, 2020/21, & 2023/24) before rising to 357 in 2024/25. In other words, virtually no change.

Primary Health

6.4.48 Primary healthcare facilities assessed here include GP surgeries and dental practices. Figure6.8 below details the location of these facilities in Thornbury.

Primary Health

GPs

1 St Mary Street Surgery

2 Thornbury Health Centre

3 Streamside Surgery

NHS Dentists

4 High Street Dental Practice

Upper M

Morton

Figure 6.8 Public GP Surgeries and Dental Practices in Thornbury

Source: Savills, Google maps, accessed August 2018

GPs

- 6.4.49 There are three GP surgeries in Thornbury. Table 6.10 sets out further information. A number of the GPs provide staff information on their websites, or via NHS Choices. Where the ratio of full time or part time staff has not been stated, then it is assumed that the number of FTE GPs is 0.818 the number of GPs (as per the average for England).
- 6.4.50 Matching the NHS estimates of FTE GPs in England in 2017⁸ with the ONS population projections for 2017⁸ returns an average patient to FTE GP ratio in England of 1:1,619 patients

⁸ General and Personal Medical Services, England March 2017, Provisional Experimental Statistics, Published 23rd May 2017

(note this measure is consistent with the standard of 1 GP – not FTE GP – per 1,700 patients in the SGC Infrastructure Delivery Plan, 2014).

6.4.51 This is a relatively simplistic assessment, as it does not take into account the health needs profile of the patients (assessed by the NHS for funding), and space at the three surgeries. All three surgeries are registered as currently accepting new patients.

Table 6.10 GPs in Thornbury

	GPs	Estimated FTE GPs	Patients	Estimated patients: FTE GPs	Estimated Spare Capacity
Thornbury Health Centre (Dr W J Foubister & Partners)	6	4.9	8,545	1,758	0
Streamside Surgery	5	4.1	5,185	1,280	1,370
St Mary Street Surgery	5	3.8 ⁹	7,828	2,060	0

Source: NHS Choices, accessed 13/09/18

Note may not sum due to rounding

- 6.4.52 Therefore there appears to be spare capacity at Streamside surgery, of some 1,370 new patients, before the ratio of patients per FTE GP is in line with the national average. Note this is relatively simplistic and does not account for the specific health needs of those on the patient list, which can vary significantly across population groups across the country. However, it has been noted that Thornbury does not suffer from deprivation relative to other areas.
- 6.4.53 According to NHS Digital there are no new GP surgeries approved or pending approval in Thornbury at the time of writing¹⁰.

Dental Practices

- 6.4.54 There is one dental practice that is currently taking on new patients through the NHS in Thornbury. The High Street Dental Practice has two dentists. At the time of writing it would take two weeks to get an NHS appointment for registered patients and 4-6 weeks for new patients (August 2018).
- 6.4.55 Across the UK there were 24,007 NHS dentists in 2016/17ⁱ serving 66 million residents; an average of 2,750 residents per dentist (note not all residents are registered patients). Based on

⁹ FTE taken from practice website (three FTE and two PT, both working 2 days a week)

 $^{^{10}\} https://digital.nhs.uk/services/electronic-prescription-service/statistics\ accessed\ 31\ August\ 2018$

an average rate of 1 dentist per 2,750 residents, there should be 4.4 NHS dentists for the 12,063 residents of Thornbury (from the 2011 Census and therefore likely an under-estimate)

6.4.56 There are no contracts for new dental services advertised in South Gloucestershire at the time of writing¹¹.

Public Open Space

6.4.57 Public open space is assessed by passive and active spaces. Passive open spaces include parks, allotments, woodlands and play areas. Active open spaces include areas used more specifically for sport and exercise like sports pitches and playing fields. The two type of open space have different impact areas, as people are willing to travel further to access sports pitches.

Passive Open Space

- 6.4.58 SGC's last open space audit was undertaken in 2010 (Open Space Audit, SGC (2010). Thornbury was assessed as having the following levels of provision of passive open space:
 - Natural and semi-natural green space: 0.48 ha per 1,000 population against a recommended standard of 1.5 ha per 1,000 population. Although the Audit notes that Thornbury residents benefit from good access to rural areas, such as the community woodland to the south of the town and the semi-natural areas and countryside close to the High Street. The stream side walk offers Thornbury residents access to a semi-natural environment within the town. Further to these assets Thornbury benefits from a good footpath network with no significant barriers to access the surrounding countryside.
 - Informal recreation open space: 1.45 ha per 1,000 population against a recommended standard of 1.4 ha per 1,000 population.
 - Provision for children and young people: 0.065 ha per 1,000 population against a recommended standard of 0.25 ha per 1,000 population.
 - Allotments: 0.08 ha per 1,000 population against a recommended standard of 0.2 ha per 1,000 population.

¹¹ www.contractsfinder.service.gov.uk accessed 21 June 2018

Active Open Space

- 6.4.59 The Open Space Audit of 2010 (SGC) reported Thornbury as having 1.62 ha per 1,000 population of outdoor sports pitches against a recommended benchmark of 1.6 ha per 1,000 (including school sites).
- 6.4.60 SGC recently published their draft 'Playing Pitch Strategy and Action Plan' (January 2018). This sets out the current utilisation and possible spare capacity of playing pitches in Thornbury. It also projects the future requirements to 2036, which is discussed in the cumulative assessment below in Section 6.9.
- 6.4.61 Table 6.11 sets out SGC's assessment of pitch provision in Thornbury:

Table 6.11 Playing Pitch Provision in Thornbury

Sport	Current Demand
Football (grass pitches)	Adult: 0.5 match sessions spare capacity.
	Youth 11v11; 9v9 and Mini 5v5: Demand is met to capacity.
	Mini 7v7: One match session spare capacity
Football (3G AGPs)	Shortfall of one full sized pitch with floodlighting to accommodate training demand.
Cricket	Demand can be catered for.
Rugby union (senior pitches)	Demand can be met. Spare capacity of 0.5 match sessions per week available.
Hockey (Sand/water based AGPs)	Demand can be catered for.
Rugby league	Demand can be catered for.
American Football	Demand can be catered for.
Lacrosse	Demand can be catered for.

Source: Draft SGC, Playing Pitch Provision (January 2018)

6.4.62 Table 6.11 shows that there is an existing shortfall of one full sized 3G artificial grass pitch and some spare capacity in adult and junior football pitches and adult rugby pitches. As discussed below in the Cumulative Assessment, a number of committed schemes have secured further playing pitch provision.

Community Centres

6.4.63 Figure 6.9 shows five community facilities within Thornbury.

Community Centres The Chantry - Thornbury & District 1 Community Association 2 The Hatch Camphill The Site 3 Armstrong Hall Complex 4 Turnberries 5 St Mary's Church Hall Proposed pedestrian routes MORTON

Figure 6.9 Community Centres within Thornbury

Source: Savills, Google maps, accessed August 2018

6.4.64 The Draft Indoor and Built Sports Facilities Strategy (SGC, 2018) identifies three of these community centres – the Chantry, Armstrong Hall and Turnberries – as village and/or community halls capable of accommodating a range of sports activities, such as carpet bowls, yoga and aerobics, mostly at a recreational level. The Draft Strategy indicates significant spare capacity at sports halls and the swimming pool (Thornbury Leisure Centre) in Thornbury.

6.5 INHERENT DESIGN MITIGATION

- 6.5.1 The overall strategy is to ensure that the Proposed Development would have a positive impact on the local and wider area with no adverse effects on local facilities and services.
- 6.5.2 From the outset, the Proposed Development proposes a range of complementary services and facilities important to create a sustainable, balanced community, including land for a primary school, a retail and community hub and substantial public open space. A full description of the Proposed Development is contained in Chapter 3 of this ES.
- 6.5.3 For the purposes of this socio-economic impact assessment, Table 6.12 outlines the assumed land uses and floorspace which could be accommodated at the Site.

Table 6.12: Proposed Floorspace Mix / Units

Land Use	Use Class	GEA (sqm) / units / spaces
Residential	C3	Up to 595 dwellings
Primary School	D1	Land for a Single Form Entry
Retail, community uses, health centre	A1-A2, D1	Up to 700 sqm

Source: Barton Wilmore, November 2018

6.5.4 The Open Space to be delivered as part of the Proposed Development is set out below:

Table 6.13: Proposed Open Space

Open Space Typology	Provision (ha)
Informal Recreation – Parks, Public Space, Green Corridors	4.40
Informal Recreation – Children and Young People	0.34
Natural and Semi-Natural Green Space	12.08
Allotments	0.30

Source: Barton Wilmore, November 2018

6.6 POTENTIAL ENVIRONMENTAL IMPACTS & EFFECTS

6.6.1 This section provides a description of the potential significant effects that could arise from the Proposed Development during construction and once operational.

Construction Impacts and Effects

Employment

6.6.2 The construction of the Proposed Development would help support construction firms operating in the region and provide jobs in the industry. The Proposed Development would lead to the creation of new direct and indirect jobs – through supply chain benefits and new expenditure introduced to the local economy.

Direct Employment

- 6.6.3 To estimate the number of jobs required for the construction of the Proposed Development, the average output per construction worker for the South West of England is applied to the estimated value of the construction works¹². The following steps are then involved:
 - average revenue per construction employee in South West England (2017) = £101,813¹³
 - estimate of number of worker years required for the construction programme based on the value of the construction project = 800.
 - Estimated length of construction programme = 8 years
 - Therefore 800 workers years divided by 8 construction years would result in an average of 100 workers on-site per annum.
- 6.6.4 The indicative construction programme assumes the development would have an 8 year build period commencing in 2020/21 and being completed by 2028/29. The creation of 800 person-years of construction work would be equivalent to an average of 100 construction job opportunities created per year over this period. Given that construction is made up of many discrete elements of work undertaken by specialists (e.g. bricklaying, carpentry, plumbing, electrics, etc) many more construction workers may be employed on the Project Site for shorter periods at any given point.
- 6.6.5 Due to the nature of the construction industry and different stages involved with the Proposed Development, not all trades would be required on the Project Site permanently and some would be on site for less time than others. The construction process would include the range of occupational levels including unskilled or labouring jobs to more senior positions, as well as across a range of professional disciplines. The Proposed Development could facilitate the growth of the local construction industry, thus enabling firms to expand and potentially take on employees.
- 6.6.6 Occupational and skill demand in the housing construction sector revolves around specialist skills, i.e. electricians, plumbers, bricklayers, carpenters and plant operating trade. These skills

Environmental Statement Land to the West of Park Farm, Thornbury

¹² To estimate the value of the construction works the number of homes of average size were entered into the BCIS database with average construction costs for South Gloucestershire, accounting for 15% externals. This arrived at an estimate construction value of £81m for the Proposed Development. [Note – this estimate has not been updated since the original ES Chapter. The reduction in circa 35 dwellings is offset by the addition of the primary school and the net impact of this change is therefore not significant.]

¹³ Business Population Estimates for UK and the Regions (ONS, 2017)

would tend to be contract labour offered by construction/building firms locally. In addition, low skill manual labour would be expected to be in demand. In this case, employment tends to be contracted via Job Centres and Employment Agencies on a needs basis.

6.6.7 South Gloucestershire has the capacity to support the low skills demand. There were 28,500 residents employed in the construction sector in 2016 (Business Register and Employment Survey) in the West of England sub-region (9,000 in South Gloucestershire). Employment in the construction sector in the wider South West region was 5% lower than its 2008 peak in 2015¹⁴, suggesting there remains sufficient latent capacity to meet higher output without creating wage or other inflationary effects.

Indirect and Induced Employment

- 6.6.8 In addition, business in the local, and regional economy, would benefit from the trade linkages that would be established to construct the development, meaning that further indirect jobs would be supported locally in suppliers of construction materials and equipment. Local businesses would generally also benefit to some extent from temporary increases in expenditure as a result of the direct and indirect employment effects of the construction phase, for example, as construction workers spend their wages in local shops, accommodation and other facilities (induced effects).
- 6.6.9 The Proposed Development would set off a chain reaction of increases in expenditure, such as through the sale of building materials, architectural services, legal services and insurance. This in turn can result in jobs close to the site where workers would spend their wages, generating an increase in demand for goods and services and generating growth in the economy.

Additional Employment

6.6.10 Table 6.14 sets out the steps involved in estimating the additionality of the construction employment.

¹⁴ Industry Insights, Construction Skills Network, Forecasts 2017-2021 (Construction Industrial Training Board)

Table 6.14: Construction Jobs - Additionality

Step involved	Jobs per annum
Construction workers on-site (gross, direct, per annum)	100
2. Leakage to workers from outside sub-region (15%) ¹⁵	-15
3. Displacement of other activities (25%) ¹⁶	-21
Operational workers on-site from sub-region (net, direct)	64
5. Employment off-site induced by construction employment (net, indirect; +50%) ¹⁷	+32
6. Net additional employment from operation of Proposed Development	95

Source: Savills, HCA Additionality Guide (2014). Note figures are rounded.

6.6.11 The impact of the net additional construction employment of 95 workers on and off-site per annum on the estimated 28,500 construction workers in the West of England is estimated to be **minor beneficial** over the **medium-term**.

Operational Impacts and Effects

- 6.6.12 This section identifies the potential socio-economic impacts of the Proposed Development upon the completion and occupation of the Proposed Development. The following characteristics have been considered:
 - Employment impacts on the labour market
 - Housing the supply of new homes
 - Social infrastructure impacts on schools, primary health services, open space and community space

Employment

6.6.13 Operational phase jobs would be generated once the construction has been completed and the Project Site is occupied. The current levels of employment associated with agricultural uses are insignificant compared to the estimates for the Proposed Development. The assessment also

¹⁵ Based on the average distance travelled to work for workers in the construction sector in West of England local authorities in the 2011 Census. Those travelling over 30km to their place of work were 15% of the total.

¹⁶ This is 'low' in the HCA Additionality Guide (2014)

¹⁷ Proportionately applied to the West of England sub-region from a national multiplier effect of +106% (United Kingdom Input-Output Analytical Table 2014: ONS, 2017)

considers displacement of jobs elsewhere, and indirect multiplier effects as a result of new jobs on the Project Site.

Direct Employment

- 6.6.14 Once operational, the Proposed Development could generate a total of 97 on-site FTE jobs.
- 6.6.15 Employment densities for each use class are set out in Table 6.15, derived from the most relevant and recent sources available predominantly the Homes & Communities Agency's (now Homes England) Employment Densities Guide, 3rd Edition, November 2015. Table 6.15 sets out the assumptions and sources. An additional figure is provided for employment within the Primary School.

Table 6.15: Operational Jobs (Direct)

Use Class	Assumed Employment Density (sqm per FTE)	Proposed Floorspace /Other	Indicative Employment (FTE)
A1, A2, D1 Use Class Uses (retail, offices, community space, health centre)	18 (NIA)	600 ¹⁸	30
(10% vacancy assumed)			
Primary School and Pre-School		N/A	24 ¹⁹
Homeworkers		630 new homes	63 ²⁰
	121		

Indirect and Induced Employment

- 6.6.16 The Proposed Development is likely to have indirect/off-site economic benefits. These are considered as indirect multiplier effects which include:
 - Supply linkage multiplier: such effects occur due to purchases made as a result of the Proposed Development and further purchases associated with linked firms along the supply chain; and

 $^{^{18}}$ The NIA is assumed to be 90% of the GIA; GIA 95% of the GEA as per HCA Guidance.

¹⁹ Average for a 210 place primary excluding caretaker, cook, cleaners, and catering staff. Source DFE workforcedata for 2018 and 2885 English primary schools with a capacity of 210 places.

²⁰ Assumed average household size of 2.3 (average for Thornbury, 2011). 61% economically active; 17% of the population work from home in South West England (Characteristics of Home Workers, ONS; 2014); 83% FTE; discounted by 47% to account for self-contractors in the agricultural sector registering home as their place of work.

- Income/induced multiplier effect: such effects are associated with local expenditure as a result of those who derive incomes from the direct and supply linkage impacts of the Proposed Development.
- 6.6.17 Indirect jobs could also be created in local services employment as a result of the additional demand generated from net addition population. We estimate that the newly resident population would support 27 food and beverage jobs, induced by the additional £944,444 per annum expenditure. Expenditure in the retail sector is balanced by the new retail space provided onsite.
- 6.6.18 Local services employment may arise through existing services but also any additional services introduced to support the development. The spending of wages by employees of the various employment generating facilities and of local firms supplying goods and services to these facilities would also support induced employment in other local shops, services and firms. These effects are capture by steps five and six in Table 6.16 below.

Additional Employment

6.6.19 Table 6.16 sets out the steps and assumptions taken in estimating the net additionality of the Proposed Development, in accordance with the Additionality Guide (HCA, 2016).

Table 6.16: Operational Jobs - Additionality

Step	o involved	FTE Jobs
1	Operational workers on-site (gross, direct, occupied)	116
2	Leakage to workers from outside West of England ²¹	0
3	Displacement of other activities (25%) ²²	-12
4	Operational workers on-site from sub-region (net, direct)	104
5	Employment off-site induced by operational employment (net, indirect; +35%) ²³	+36
6	Employment off-site induced by residential expenditure (+£944,444m p.a.)	+27
7	Net additional employment from operation of Proposed Development	167

Source: Savills, HCA Additionality Guide (2014)

²¹ Local retail jobs are anticipated to come from the local authority area. Leakage does not apply to homeworkers.

²² This is 'low' in the HCA Additionality Guide (2014) and applied to the commercial and education employment.

²³ Multiplier effects for office activities (between local and regional levels) allocated to homeworkers; the predominant type of employment on-site (HCA Additionality Guide 2014).

- 6.6.20 Table 6.16 shows that there would a net impact of 167 new FTE jobs on the WoE labour market (550,300 workers). This accounts for the range of uses across the Project Site, including community and retail uses.
- 6.6.21 The Proposed Development is assessed to have **minor beneficial** effect over the **long term** on the **West of England** economy.

Housing

6.6.22 The baseline reported that SGC has had difficulty achieving its annual housing growth targets with an average of 83% of the annual target achieved between 2013/14 - 2017/18. The emerging JSP increases the annual target for SGC to 1,625 dwellings per annum and as set out in the baseline, evidence has been presented to the forthcoming JSP Examination which indicates that the housing targets for the WoE should be increased further.

6.6.23 .

- 6.6.24 The Proposed Development would provide up to 595 dwellings across an estimated 8 year construction timeframe (first completions to last completions); approximately 80 units per annum. This would account for 5% of the annual target of 1,625 new dwellings per annum for South Gloucestershire, and would deliver 240 dwellings within the next five year housing land supply period (2019-2024).
- 6.6.25 The Proposed Development will provide the policy-compliant level of affordable housing; at 35%. This would equate to up to 208 affordable units that have not been accounted for in the strategic planning as it is an unallocated site. The Core Strategy identifies an annual need of 903 new affordable units per annum 2009-2021, but the 2018 AMR reports an average of 323 new units per annum in the five years between 2013/14 2017/1. Only 36% of the affordable housing need has been met per annum, creating a cumulative shortfall of 2,900 units over the five year period. Against the emerging housing requirement, the West of England Authorities have confirmed there will be a shortfall in the delivery of affordable housing against their assessment of need.
- 6.6.26 The market housing would be a mix of housing types and sizes, in accordance with market demand. At this stage of the planning process the details of the housing mix have not been determined.
- 6.6.27 The 2018 AMR reports that there are only six other strategic sites that offer the potential for more housing capacity than the Proposed Development. It would therefore be a significant addition to the housing pipeline for SGC. Including the impact of the affordable housing, the Proposed Development is estimated to have a moderate beneficial impact on the supply of housing in the South Gloucestershire Impact Area over the medium term.

Social Infrastructure

Early Years

- 6.6.28 Due to the limitations of data available, the baseline was unable to conclude whether there is spare capacity at the four early years facilities within the Walkable Impact Area of the Proposed Development. The four facilities have a capacity of 190 places. To be conservative we assume there is no spare capacity.
- 6.6.29 The Commissioning of School Places Strategy (SGC; 2016) states that a formula for estimating the number of pre-school children generated by future development is based on a housing mix, which at this stage is unavailable given the nature of the planning permission sought. Based on Savills experience, approximately 10% of the number of primary aged children (see next section) would require early years education spaces. This equates to 21 places. A standard provision new primary school will have a 26 place pre-school nursery classroom as part of the accommodation.
- 6.6.30 In order to address the shortfall in pre-school nursery places the application proposals incorporate provision as part of the on-site primary school. This provision would satisfy the need arising from the development and the impact of the proposed development on the users of pre-school facilities in the Walkable Impact Area is estimated to be neutral.

Primary Education

- 6.6.31 The Commissioning of School Places Strategy (SGC; 2016) sets out that occupancy levels of primary aged children at new housing developments are 36 per 100 dwellings. This is derived from direct observation across the District, and it is at the upper end of child yields based on new housing occupancy surveys in Savills' experience.
- 6.6.32 Applying this standard here, at up to 595 new homes the Proposed Development would accommodate 214 primary school aged children, aged 4-11. In Savills experience child occupancy rates derived from surveys of new housing often return levels that reflect short-term demand, rather than long term needs. This is due to the over-representation of young couple and families that move into new housing developments. As they age in place, child occupancy rates decline. Therefore there may be a temporary bulge in the younger age cohorts but this would likely reduce over time.
- 6.6.33 The baseline assessment indicates that there is currently no spare capacity within primary schools in the Walkable Catchment. There is therefore the potential for adverse off-site impacts on neighbouring primary schools and residents that use them. The application proposals incorporate a single form entry primary school with a capacity for 210 pupils. This is located in the centre of the development and designed to accommodate the additional need for primary

school places arising from the Proposed Development. The development will therefore a **neutral** impact on the **users of primary schools** over the **long-term**.

Secondary Education

- 6.6.34 The DfE School Capacity Data reports spare capacity of 749 places at Marlwood secondary school and 79 at The Castle against a capacity of 3,117 places. Projections for the Castle and Marlwood secondary schools indicate that the roll will be 2,446 in 2024..
- 6.6.35 The Commissioning of School Places Strategy (SGC; 2016) sets out that occupancy levels of secondary aged children at new housing developments are 18 per 100 dwellings. This is consistent with Savills experience in other areas.
- 6.6.36 At up to 595 new homes, the Proposed Development would accommodate approximately 107 secondary school aged children. The secondary education needs of these children would need to be met off-site. The baseline assessment reveals that there is likely to be spare capacity in the Secondary School Impact Area up to and including 2024, therefore the Proposed Development is estimated to have a neutral impact on the users of secondary schools in the Secondary School Impact Area over the long-term.

Primary Health - GPs and Dentists

- 6.6.37 The baseline indicates some spare capacity of 1,370 patients at Streamside GP surgery. There was no spare capacity identified at dental practices in Thornbury based upon comparisons to national rates of provision.
- 6.6.38 Utilising the average household size for Thornbury of 2.3 persons in 2011, then the incoming resident population from the Proposed Development would be 1,369 people. This almost precisely matches the spare capacity at Streamside GP surgery, which would meet the needs of the Proposed Development.
- 6.6.39 Across the UK there were 24,007 NHS dentists in 2016/17²⁴ serving 66 million residents; an average of 2,750 residents per dentist (note not all residents are registered patients). Based on an average rate of 1 dentist per 2,750 residents, the incoming population would generate demand for 0.5 of a dentist.
- 6.6.40 Due to the relatively low requirements triggered by the incoming population, the more efficient solution to accommodate the 0.5 dentist required is likely to be at premises off-site, serving the needs of a larger population.

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²⁴ NHS dental statistics 2016/17

- 6.6.41 A health centre and/or dental practice could be located within the Proposed Development; with provision for D1 uses in the Retail and Community Hub. Given the need of the incoming population this would likely serve a wider catchment.
- 6.6.42 The impact of the Proposed Development on users of primary health services in Thornbury Impact Area is estimated to be negligible.

Passive Open Space

- 6.6.43 The Proposed Development provides sufficient passive open space to meet the needs of the incoming population.
- 6.6.44 The Core Strategy sets out the requirements for types of open space, per 1,000 population. Table 6.17 sets these out, estimates the requirement for the incoming population (1,369 residents) and compares this requirement to the amount of space planned.

Table 6.17: Open Space Requirements

Typology	Requirement (ha/1,000) population	Requirement for proposed development (ha)	Area in proposed development (ha)
Informal recreation open space	1.15	1.57	4.40
Natural and semi-natural green space	1.5	2.05	12.24
Provision for children and young people	0.25	0.34	0.34
Allotments	0.2	0.27	0.3

Source: Open Space Typologies

- 6.6.45 Table 6.17 shows that the Proposed Development meets the Core Strategy requirements for allotments and provision for children and young people. It significantly exceeds requirements for informal recreation open space and natural and semi-natural green space. The baseline reports that Thornbury was assessed as having lower levels of natural and semi-natural green space, allotments and provision for young people in the 2010 Audit.
- 6.6.46 The impact of the proposed development on users of passive open space in Walkable Impact Area is estimated to be moderate beneficial over the long-term; with benefits to the wider community.

Active Open Space

- 6.6.47 The requirement of the Core Strategy is for 1.6 ha of 'outdoor sports facilities' per 1,000 population. This equates to 2.19 ha for the Proposed Development.
- 6.6.48 The Proposed Development does not provide active open space on the Project Site and therefore if provision was not increased the newly introduced population is likely to add pressure on existing facilities within Thornbury. As identified in the baseline, SGC have subsequently

published a Draft Playing Pitch Strategy and Action Plan (January 2018) which departs from the area/population ratio set out in the Core Strategy, and instead provides a detailed assessment based upon individual pitch requirements. This shows that there is currently spare capacity in adult and junior football pitches, rugby pitches and hockey pitches. When the additional provision included within the Park Farm development is factored into the supply, based upon the summary in Table 6.4 of the Action Plan, supply would broadly match demand. The only shortfall identified at Thornbury is in 3G pitch provision, however, the Plan states that "there is not sufficient demand to warrant an additional full sized 3G at present".

If the evidence indicates that a shortfall exists, then the Proposed Development could have an adverse impact on users of active open space in Thornbury Impact Area over the long-term. The magnitude of this impact and the required mitigation measures will be agreed through discussions on the Section 106 Agreement. Community Space

- 6.6.49 The baseline reported five community centres within the Thornbury Impact Area. The Draft Indoor and Built Sports Facilities Strategy (SGC, 2018) reports that three of the five centres provide space for sports, and identifies significant spare capacity at sports halls in Thornbury.
- 6.6.50 The SGC Infrastructure Delivery Plan (2014) sets a standard of 0.14 sqm per person for new developments and anticipates that a new community centre would serve 4,000 people. At an estimated 1,369 new residents the Proposed Development would not trigger the need for a new community centre, and it appears as though there is spare capacity across the five existing centres to account for new population.
- 6.6.51 On this basis the impact of the Proposed Development is assessed to be **neutral** on **users of the community centres** in the **Thornbury Impact Area**.

6.7 ADDITIONAL MITIGATION, COMPENSATION & ENHANCEMENT MEASURES

- 6.7.1 As a result of inherent mitigation proposed as part of the Proposed Development, a number of the impacts assessed above would be largely positive and therefore would not give rise to a requirement for additional mitigation and enhancement measures. Similarly, other impacts are assessed as minor/negligible with no mitigation required. Other specific measures to mitigate or enhance impacts are indicated below.
- 6.7.2 For adverse effects, the Proposed Development would be liable for CIL payments. The current CIL rate is £80/m2 plus indexation. The Project Site is not an identified Exception on the Regulation 123 List, and as such, the collected monies are intended to be spent by SGC on the provision of infrastructure to support development within the plan area. This includes on primary and secondary education, early years provision, youth services, community meeting rooms, libraries, health and social care and indoor leisure. CIL is designed to mitigate the impact of population growth, and is intended to provide flexibility to a local authority to allocate funds

received to areas of most need. However, it is also possible to direct monies collated through CIL to identified projects through the s106, being signed by both the local authority and developers, and as such, the necessary mitigation can be secured.

Operational Phase

Social Infrastructure

Pre-School

6.7.3 The provision of land for a Pre-school Nursery alongside the Primary School within the application proposals and the funding of delivery through CIL results in a **neutral** impact on Pre-School provision.

Primary Education

6.7.4 The provision of land for a Primary School within the application proposals and the funding of delivery through CIL results in a **neutral** impact on Primary Education.

Secondary Education

6.7.5 The impact of the secondary aged children at the Proposed Development is likely to have no impact but were circumstances to change would be appropriately mitigated with CIL payments.

Active Open Space

6.7.6 Open space (including sports pitches) is not included in the CIL 123 List. Appropriate mitigation could therefore be off-site contributions to new or improved spaces in Thornbury; secured through Section 106 payments, should discussions with SGC indicate that this is required to meet an identified shortfall.

6.8 RESIDUAL ENVIRONMENTAL IMPACTS & EFFECTS

6.8.1 The additional mitigation, compensation and enhancement measures outlined in Section 6.7 would have the following effects on the environmental impacts:

Social Infrastructure

Pre-School

6.8.2 With the mitigation measures outlined above, the moderate adverse impact would become **neutral.**

Primary Education

6.8.3 With the mitigation measures outlined above, the moderate adverse impact would become **neutral.**

Secondary Education

6.8.4 With the mitigation measures outlined above the moderate adverse impact would become **neutral**.

Active open space

6.8.5 With the mitigation measures outlined above the moderate adverse impact would become **neutral.**

6.9 CUMULATIVE EFFECTS

- 6.9.1 There are seven cumulative developments set out in Table 5.3. For the purposes of this assessment, the developments identified at Pound Mill Business Park (Ref: 13/3101) and The Council Offices (Ref: 16/0982) have not been considered further by virtue of the scale and nature of the schemes.
- 6.9.2 Of the remaining cumulative sites, apart from 'Land at the junction of Morton Way and Grovesend Road' (Ref: 16/3565) all would be within a walkable catchment of the Proposed Development.
- 6.9.3 Two of these sites (Park Farm and Morton Way) have been under-construction for a number of years. The baseline of this socio-economic assessment varies depending on the dataset available, and as such, a conservative figure is used of March 2017 when 228 units had been completed on these two development sites.
- 6.9.4 Cumulatively, the remaining proposals are for up to 1,177 new dwellings. Using an average household size of 2.3 (average for Thornbury in 2011) this would result in 2,707 new residents. With the Proposed Development, this would be an additional 4,076 new residents. Household sizes tend to be larger in new homes, before the occupants age in place, so the new population size could be higher in the short-medium term.
- 6.9.5 Using the standards set out in this assessment the additional 4,076 residents would require 2.6 GPs, 1.5 dentists, 5.7 ha of informal recreation space, 6.1 ha of natural and semi-natural green space, 1.0 ha of space of young people and children, 0.8 ha of allotments, 6.5 ha of outdoor sports space, 2.2 forms of entry at secondary school level and 3.1 forms of entry at primary school. The baseline review did not find significant existing spare capacity in these categories.

- 6.9.6 The additional 4,076 residents would create the need for a new community centre (4,000 residents threshold) however the baseline found spare capacity across the existing five centres.
- 6.9.7 The impact of each proposed development on social infrastructure is assessed at the planning application stage. As none of the cumulative schemes are listed as Exceptions in the CIL Regulation 123 List they would be liable for CIL payments (with the exception of Park Farm, as it was approved prior to the implementation of CIL with South Gloucestershire). CIL is designed to mitigate the impact of population growth and can be allocated towards education, primary health and community centres, amongst other things. Open space (including sports pitches) is not included in the CIL 123 List and should be designed as an inherent consideration in the proposals for each scheme, or where appropriate, mitigated by off-site contributions to new or improved spaces within Thornbury with Section 106 payments; where there is an existing deficit in provision.
- 6.9.8 All of the schemes provide a range of different types of passive open space for residents onsite; meeting the Core Strategy requirements for informal recreation space, natural and seminatural green space, children's and youth person provision and allotments.
- 6.9.9 Land at junction of Morton Way and Grovesend Road (Ref: 16/3565) safeguards space for a community use on the site, and as such, SGC could deliver further community uses through CIL receipts, should the need arise.
- 6.9.10 This assessment of the Proposed Development estimates a Negligible impact on users of Active Open Space following mitigation through a S106 Agreement. The recent SGC draft 'Playing Pitch Strategy and Action Plan' (January 2018) presents a current shortfall of one full-size football pitch (3G AGPs). It also presents a forecast of demand to 2036, based on an additional 1,100 new homes at strategic development sites in Thornbury 2013-2036.
- 6.9.11 This compares to 2,035 new homes with the Proposed Development and cumulative sites (accounting for completions at these sites since 2013). The most significant component of the difference is the Proposed Development of up to 595 new homes. The forecast therefore presents a picture of a future baseline including the cumulative sites, without the Proposed Development
- 6.9.12 The future demand identifies a shortfall in:
 - Youth football grass pitch (11v11) one match per week
 - Youth football grass pitch (9v9) one match per week
 - Mini football grass pitch (7v7) one match per week

- Two 3G artificial grass pitches for football with floodlighting
- 6.9.13 However, the supply (p85-86) with the assessment does not include the additional playing pitches which have been secured as part of the committed strategic developments. This includes four outdoor sports pitches at Park Farm; a junior pitch solely for the Castle school, and three full-size pitches for dual school/community use. Land at Morton Way (Ref: 12/2395) also provides formal outdoor sports pitches; with the provision of one senior and one junior pitch.
- 6.9.14 In summary, each of the five schemes meets the needs of its residents, either with provision on-site, with contributions to off-site improvements or through the payment of CIL.

6.10 ASSESSMENT SUMMARY

- 6.10.1 The assessment has been conducted in accordance with the 2017 Regulations. The approach is also in line with best practice methods for social and economic impact assessment including the 'Social Impact Assessment: Guidance for assessing and managing the social impacts of projects' from the International Association of Impact Assessment.
- 6.10.2 The stages of the methodology include:
 - Review of public policy review relevant public policy
 - Definition of socio-economic baseline conditions including a review of existing the demographic and economic profile of the local population, relevant social infrastructure (e.g. primary health care, open space) and any spare capacity.
 - Impact assessment considering the nature, scale and permanence of the potential impacts on the relevant impact areas during the construction and operational phases of the Proposed Development.
 - Mitigation measures and residual impacts.
 - Cumulative impacts
 - Summary of impacts.
- 6.10.3 The baseline conditions identify that:
 - In 2011 there were 12,063 people living in Thornbury with an average household size of 2.3.
 - The population of South Gloucestershire is forecasted to grow at a faster rate over 2016-2036 than England and the South West.

- The population of South Gloucestershire is projected to age, with 35% growth in those aged 60 or over. Compared to changing age structures in the South West, South Gloucestershire is projected to have a higher growth in the number of young people (0-19 years) and working age population (20-59 years).
- Unemployment rates in the West of England were 3.9% in 2018, below the England average.
- Professional services and administration & support are expected to drive employment growth between 2015 and 2036, adding 16,000 and 12,000 new jobs respectively.
- Thornbury is not generally a deprived area. The area on the north-western fringe of the town, close to the proposed development, is amongst the least deprived of the areas.
- Since 2013, there has been an average of 1,331 net new dwellings per annum (four years 2013/14 to 2017/18) completed in South Gloucestershire, 17% below the target annual target in the Core Strategy, with a cumulative deficit of 1,395 new dwellings since 2013/14.
- There are four pre-schools within a walkable catchment of the Proposed Development.
 It is not clear whether there is any spare capacity.
- There are six comprehensive-admission primary schools within a walkable catchment of the Proposed Development. This does not include the addition Primary School proposed as part of the planning application.
- There are two comprehensive-admission secondary schools within the 3.9 mile radius
 of the Proposed Development. By 2022 there is projected to be no spare capacity in
 the Year 7 cohorts at Castle and Marlwood secondary schools.
- There are three GP surgeries in Thornbury. Streamside GP surgery appears to have spare capacity in terms of its ratio of patients per GP.
- There is one dental practice with two dentists offering NHS services in Thornbury. They
 are serving a larger population than the national average.
- In the 2010 Open Space Audit Thornbury had less open space for young people and children, allotments and natural and semi-natural green space than the local standards.
 It had slightly more informal recreation space than the standard. There are four passive open spaces within a walkable catchment of the Proposed Development.

- In the 2018 Playing Pitch Strategy and Action Plan Thornbury there is a shortfall of one full sized 3G artificial grass pitch and some spare capacity in adult and junior football pitches and adult rugby pitches.
- There are five community meeting spaces in Thornbury. The draft Indoor and Built Sports Facilities Strategy identifies significant spare capacity at sports halls in Thornbury.
- 6.10.4 In order of magnitude of beneficial impact to adverse impact, the potential effects and relevant mitigation measures were:
 - The Proposed Development is estimated to have a moderate, beneficial impact on the supply of housing in the South Gloucestershire Impact Area over the medium term.
 - The Proposed Development is estimated to have a **moderate**, **beneficial** impact on **users of passive open space** in the **Walkable Impact Area** over the **long term**, as the proposal provides significantly more informal recreation open space and natural and semi-natural green space than the Core Strategy standards. The baseline reports that Thornbury was assessed as having lower levels of natural and semi-natural green space, so this over-provision would help alleviate this deficiency and provide a resource for residents in the surrounding area.
 - The impact of the employment accommodated at the Proposed Development on the West of England economy once operational is assessed to be minor beneficial over the long term, accounting for the additionality of 167 jobs created.
 - The impact of the net additional construction employment of 95 workers on and offsite per annum on the estimated 28,500 construction workers in the West of England is estimated to be minor beneficial over the medium-term.
 - The opportunity to provide community space is preserved at this outline application stage, and the impact is assessed to be neutral on the Walkable Impact Area.
 - The impact of the Proposed Development on primary health services in the Thornbury Impact Area is estimated to be negligible.
 - The impact of the Proposed Development is estimated to have a **neutral** impact on users of early years and primary school facilities in the Walkable Impact Area.
 - The impact of the Proposed Development on users of active open space in
 Thornbury Impact Area is identified as a potential adverse over the long-term;

subject to further discussions with SGC in light of committed schemes. Should a deficit be identified, then mitigation in the form of Section 106 payments allocated to new or improved spaces in Thornbury would reduce any impact to **neutral**.

• The Proposed Development is estimated to have a neutral impact on the Secondary School Impact Area over the long-term. If circumstances change any necessary mitigation will be implemented through CIL payments, to be spent on increasing the capacity of secondary schools in the Secondary School Impact Area by SGC, the impact would remain neutral.

6.10.5 These are also summarised in Table 6.18.

Table 6.18: Socio-economics Assessment Summary

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
Construction Effects								
Employment	n/a	Beneficial	Minor	Not significant	None required	Minor	Not significant	n/a
Operation Effects								
Employment	n/a	Beneficial	Minor	Not significant	None required	Minor	Not significant	n/a
Housing supply	n/a	Beneficial	Moderate	Significant	None required	Moderate	Significant	n/a
Early Years Education	n/a	Neutral	Negligible	Not Significant	CIL Payment	Negligible	Not significant	n/a
Primary Education	n/a	Neutral	Negligible	Not Significant	CIL Payments	Negligible	Not significant	n/a
Secondary Education	n/a	Neutral	Negligible	Not Significant	CIL payments	Negligible	Not significant	Dependent upon SGC allocating CIL receipts to meeting need.
Primary Health – GPs and Dentists	n/a	Neutral	Negligible	Not significant	None required	Negligible	Not significant	n/a
Passive Open Space	n/a	Beneficial	Moderate	Significant	None required	Moderate	Significant	n/a
Active Open Space	n/a	Adverse	Moderate (potential)	Significant	Section 106 payment (if required)	Negligible	Not significant	Dependent upon agreement with SGC.
Community Space	n/a	Adverse	Negligible	Not significant	None required	Negligible	Not significant	n/a

Cumulative Effects

Effect	Description	Mitigation	Significance	Confidence Level
Construction Employment	Beneficial effect of temporary construction employment	None required	Not significant	n/a
Operational Employment	Beneficial effect of operational employment, including home workers	None required	Not significant	n/a
Housing supply	Beneficial effect of increasing the housing supply	None required	Significant	n/a
Early Years Education	No cumulative impact as the primary education requirements will be delivered on land as part of the development.	CIL payments	Not significant	Dependent upon SGC allocating

				CIL receipts to meet need.
Primary Education	No cumulative impact as the primary education requirements will be delivered on land as part of the development.	CIL payments	Not significant	Dependent upon SGC allocating CIL receipts to meet need.
Secondary Education	Potential adverse effect of increasing demand for secondary education infrastructure	CIL payments	Not significant	Dependent upon SGC allocating CIL receipts to meet need.
Primary Health – GPs and Dentists	Potential adverse effect of increasing demand for primary health infrastructure	CIL payments	Not significant	Dependent upon SGC allocating CIL receipts to meet need.
Passive Open Space	Potential adverse effect of increasing demand for passive open space	On-site provision (each site meets its own needs)	Not significant	n/a
Active Open Space	Potential adverse effect of increasing demand for active open space	On-site provision/Section 106 payments	Not significant	Dependent upon agreement with SGC.
Community Space	Potential adverse effect of increasing demand for community space	CIL payments	Not significant	Dependent upon SGC allocating CIL receipts to meet need.

Table 6.19: Mitigation Implementation

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Off-site contributions towards the improvement/increased capacity of primary health facilities	SGC	CIL	To meet the needs of the incoming population.	In tandem with occupancy of the Proposed Development
Off-site contributions towards the improvement/increased capacity of pre-school provision	SGC	CIL	To meet the needs of the incoming population.	In tandem with occupancy of the Proposed Development
Off-site contributions towards the delivery of the improvement/increased capacity of primary education facilities	SGC	CIL	To meet the needs of the incoming population.	In tandem with occupancy of the Proposed Development
Off-site contributions towards the improvement/increased capacity of secondary education facilities	SGC	CIL	To meet the needs of the incoming population.	In tandem with occupancy of the Proposed Development
Off-site contributions towards the improvement/increased capacity of outdoor sports facilities (if required)	SGC	Section 106	To meet the needs of the incoming population.	In tandem with occupancy of the Proposed Development

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