

LAND AT DEAL GROUND AND MAY GURNEY

Environmental Statement Addendum – Chapter 13: Socio-Economics & Health

Serruys Property Company Limited

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13 SOCIO-ECONOMICS & HEALTH

13.1 Introduction

13.1.1 Purpose and Structure of the Chapter

This Chapter provides an assessment of the effects of the proposed development on socio-economics and health during both the demolition and construction, and the completed development stage.

As this is an Environmental Statement Addendum (ESA), the assessment presented in this Chapter identifies any significant effects that are likely to occur when considering the proposed development against the existing and future baseline for the following aspects, which were previously considered in the original Environmental Statement (ES):

- i. Population
- ii. Housing
- iii. Education
- iv. Health services
- v. Community facilities
- vi. Recreation and open space
- vii. Employment
- viii. Health aspects including:
 - a. Air quality
 - b. Noise
- ix. Tourism
- x. Crime

Measures to mitigate potential adverse effects and enhance potential beneficial effects are also considered, before the residual effects are set out.

In undertaking the socio-economic assessment of the proposed development, there have been a number of limitations and constraints affecting the outputs from this work. These include:

- i. Data Availability: The assessment of effects has been undertaken against the most recent, publicly available data; the progress of emerging data was tracked throughout to ensure an up-to-date assessment has been presented. The spatial levels have been assessed where data has been available and/or where it has been considered most informative based on professional judgement. Where data has not been available at the identified levels, alternative spatial data deemed relevant and appropriate has been used.
- ii. Information Received: The assessment has been based on information received from a number of parties including the Applicant and design team, and it is assumed that the information is accurate. The assessment assumes that the proposed development would be delivered as per the full planning application building schedule.

13.2 METHODOLOGY

13.2.1 Changes in Legislation, Guidance and Planning Policy

A number of social and economic policy documents, area assessments and regeneration strategies have been produced which together set the social and economic policy context for the area. The key policy documents relevant to the study area, in descending order of national, regional to local scale, are:

- i. National Planning Policy Framework (NPPF)¹;
- ii. National Planning Practice Guidance (PPG)²;
- iii. Greater Norwich Development Partnership (GNDP) Joint Core Strategy (JCS) for Broadland, Norwich and South Norfolk³; and
- iv. The Greater Norwich Local Plan (GNLP) Publication Draft Plan⁴

13.2.1.1 National Planning Policy Framework (NPPF)

The NPPF sets out the Government's planning policies for England and how these are expected to be applied. It should be seen as a framework within which locally prepared plans and other development can be produced.

The planning system has three over-arching objectives:

- i. An economic objective: to build the economy by ensuring that the right amount of land is available at the right time and place in order to support growth and innovation;
- ii. A social objective: to support strong, vibrant and healthy communities, ensuring that sufficient homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs; and
- iii. An environmental objective: contributing to protecting and enhancing our natural, built and historic environment.

At the heart of the NPPF is a presumption in favour of sustainable development, which should be applied to both plan-making and decision-making. In the case of the former, it means that the objectively assessed needs for housing and other uses should be provided for in plans. For the latter, it means approving proposals that accord with the development plan without delay and in the absence of a development plan or an out of date one, approving unless the NPPF provides a clear reason for refusal. In both plan-making and decision-taking, should the policies' or proposals' adverse impacts significantly and demonstrably outweigh the benefits when assessed against the NPPF's policies then they should also not be progressed or the application refused.

¹ Ministry of Housing, Communities & Local Government, 2021. National Planning Policy Framework. London: MHCLG

² Ministry of Housing, Communities and Local Government (Live Document). Planning Practice Guidance. MHCLG.

³ Greater Norwich Development Partnership (GNDP), 2017. Joint Core Strategy (JCS) 2011-2031 for Broadland, Norwich and South Norfolk.

⁴ Broadland District Council, Norwich City Council and South Norfolk Council and Norfolk County Council, (Live document). Greater Norwich Local Plan (GNLP) 2018-2038

The NPPF sets out a number of policies to deliver sustainable development, those of most relevance to this chapter are as follows:

- i. Chapter 5—Delivering a sufficient supply of homes: the objective of significantly boosting the supply of homes with a sufficient amount and variety of land brought forward where it is needed, addressing the needs of groups with specific housing requirements, and developing land that has permission without unnecessary delay. Strategic policies should be informed by a local housing need assessment and where major housing development is proposed at least 10% of the homes are to be available for affordable home ownership, unless this would exceed the level of affordable housing required in the area, or significantly prejudice the ability to meet the identified affordable housing needs of specific groups.
- ii. Chapter 6—Building a strong, competitive economy: Policies should set a clear economic strategy encouraging sustainable economic growth with regard to Local Industrial Strategies and other local policies for economic development and regeneration. They should identify and set criteria for strategic sites, address potential barriers to investment (e.g. inadequate infrastructure, services or housing, or a poor environment) and be flexible, enabling a rapid response to changes in economic circumstances.
- iii. Chapter 8—Promoting healthy and safe communities: Planning policies and decisions should seek to achieve healthy, inclusive and safe places that promote social interaction, are safe and accessible, enable and support healthy lifestyles, and provide the social, recreational and cultural facilities and services the community needs. In particular, Chapter 8 identifies the need for:
 - mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;
 - prevention of crime and disorder, and the fear of crime, so that they do not undermine
 the quality of life or community cohesion, using clear and legible pedestrian routes, and
 high quality public space, which encourage the active and continual use of public areas;
 - policies and proposals that address identified local health and well-being needs through
 the provision of safe and accessible green infrastructure, sports facilities, local shops,
 access to healthier food, allotments, and layouts that encourage walking and cycling;
 - sufficient choice of school places to meet the needs of existing and new communities;
 - promotion of public safety, taking into account wider security and defence requirements
 by anticipating and addressing possible malicious threats and natural hazards, especially
 in locations where large numbers of people are expected to congregate (including
 transport hubs, night-time economy venues, cinemas and theatres, sports stadia and
 arenas, shopping centres, health and education establishments, places of worship,
 hotels and restaurants, visitor attractions and commercial centres); and
 - access to a network of high quality open spaces and opportunities for sport and physical
 activity to support the health and well-being of communities. Planning policies should
 be based on robust and up-to-date assessments of the need for open space, sport and

recreation facilities (including quantitative or qualitative deficits or surpluses) and should consider opportunities for new provision.

iv. Chapter 12—Achieving well-designed places: Good design is a key aspect of sustainable development, creating better places in which to live and work and helping to make development acceptable to communities. Amongst several benefits of good design, the NPPF references the benefits that design can have in creating places that are safe, inclusive and accessible, promoting health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

13.2.1.2 National Planning Practice Guidance (PPG)

The PPG5 was last published by the Ministry of Housing, Communities and Local Government (MHCLG) in 2016 and most recently updated in July 2021. Relevant guidance addresses the following:

- i. Ensuring the vitality of town centres;
- ii. Health and wellbeing;
- iii. Housing and economic land availability assessment; and
- iv. Open space, sports and recreation facilities, public rights of way and local green space.

13.2.1.3 Greater Norwich Development Partnership (GNDP) Joint Core Strategy (JCS) for Broadland, Norwich and South Norfolk

The Joint Core Strategy for Broadland, Norwich and South Norfolk is the key planning policy document for the Greater Norwich area. It forms part of the Local Plans for the districts of Broadland, Norwich and South Norfolk setting out the broad vision for the growth of the area and containing strategic policies for the period 2008 – 2026.

The Joint Core Strategy for Broadland, Norwich and South Norfolk (JCS) was adopted on 22 March 2011. Following a legal challenge a High Court Judgment, in February 2012, ruled that the parts of the Joint Core Strategy concerning the North East Growth Triangle (NEGT) should be remitted for further consideration and that a new Sustainability Appraisal for that part of Broadland in the Norwich Policy Area be prepared.

- i. Policy 2: Promoting good design. All development will be designed to the highest possible standards, creating a strong sense of place.
- ii. Policy 4: Housing delivery. Allocations will be made to ensure at least 36,820 new homes can be delivered between 2008 and 2026, of which approximately 33,000 will be within the Norwich Policy Area (NPA), distributed in accordance with the Policies for places.
- iii. Policy 5: The economy. The local economy will be developed in a sustainable way to support jobs and economic growth both in urban and rural locations.
- iv. Policy 7: Supporting communities. All development will be expected to maintain or enhance the quality of life and the well being of communities and will promote equality and diversity, and protect and strengthen community cohesion.

⁵ Ministry of Housing, Communities and Local Government (Live Document). Planning Practice Guidance. MHCLG.

v. Policy 8: Culture, leisure and entertainment. The cultural offer is an important and valued part of the area. Existing cultural assets and leisure facilities will be maintained and enhanced. The development of new or improved facilities including those supporting the arts, street events, concerts and the creative industries sector will be promoted.

13.2.1.4 Greater Norwich Local Plan (GNLP)

The Broadland District Council, Norfolk County Council and South Norfolk District Council are currently preparing the Greater Norwich Local Plan (GNLP). The GNLP will build on the long-established joint working arrangements for Greater Norwich which have delivered the current Joint Core Strategy (JCS) for the area. The JCS plans for the housing and job needs of the area to 2026 and the GNLP will ensure that these needs continue to be met to 2036.

The GNLP will include strategic planning policies and will also allocate individual sites for development. It will aim to ensure that new homes and jobs are delivered and the environment is protected and enhanced, promoting sustainability and the effective functioning of the area.

The GNLP promotes housing choice and supports economic activity within the rural parishes that surround market towns and key service centres. It also aims to provide a greater degree of opportunity for smaller builders to develop with their local supply chains and bespoke designs.

The strategy will include the following policies:

- i. Policy 1 The Growth Strategy outlines the broad strategic approach to growth and housing;
- ii. Policy 2 Sustainable Communities details 10 strategic issues which all developments must be designed to address to be sustainable;
- iii. Policy 3 Environmental Protection and Enhancement addresses the requirements for conserving and enhancing our natural and built environment and heritage;
- iv. Policy 4 Strategic Infrastructure identifies how growth in Greater Norwich will be supported and delivered through necessary infrastructure improvements;
- v. Policy 5 Homes provides detail on how new homes must address different housing needs including affordable homes, homes for older people, and student accommodation; and
- vi. Policy 6 The Economy sets out details of the key strategic employment areas, the main business sectors, and additional jobs needed up to 2038.

13.2.2 Scoping Opinion

Three scoping opinions were received for the assessment of the proposed development, with details on specific mention to socio economic requirements within the assessment

- iv. The Norwich City Council scoping opinion requires an assessment of the impact of the development and any necessary mitigation arising from it be included and set out as part of the EIA process, falling under the headings of socio-economic impacts (recreation and wellbeing) which is relevant to this addendum, and Ecology (recreational pressures)
- v. The Norfolk County Council scoping opinion has scoped in socio economics, with a requirement to address how the proposed development would mitigate against the impacts of education, health and community services, crime and disorder, employment and recreational impacts on Whitlingham Country Park
- vi. The Broads Authority scoping opinion makes no explicit mention to socio economic receptors to be addressed within the assessment

13.2.3 Additional Consultation

No additional consultation has taken place following the scoping opinion.

13.2.4 Assessment Methodology

There is no specific guidance available which establishes a methodology for undertaking an Environmental Impact Assessment (EIA) of the socio-economic or health effects of a proposed development. Accordingly, the approach adopted for this assessment is based on professional experience and best practice, and in consideration of the policy requirements/tests set out within the National Planning Policy Framework (NPPF) and local planning policy.

Receptor sensitivity criteria

The following provides information on the scale of receptor sensitivity considered within the assessment:

- i. High: Local population and economy (especially where there is low resilience)
- ii. Medium: Regional and sub-regional population and economy (especially where there is medium resilience)
- iii. Low: National population and economy (especially where there is high resilience)

Magnitude of impact criteria

The following provides information on the scale of magnitude of impact considered within the assessment:

- i. Large: Substantial effect on receptors and high number of receptors affected
- ii. Medium: Noticeable effect on receptors and medium number of receptors affected
- iii. Small: Hardly perceptible effect on receptors and low number of receptors affected

Scale of effect criteria

Considering receptor sensitivity and magnitude of impact, Table 13. 1 shows the scale of effect considered within the assessment

Table 13. 1: Significance Matrix

		Magnitude of Impact					
		Large	Medium	Small			
or ity	High	Major / Moderate	Moderate / Minor	Minor / Negligible			
eptc	Medium	Moderate	Moderate / Minor	Minor / Negligible			
Rec	Low	Moderate / Minor	Minor	Negligible			

Based on professional judgement, those effects of a moderate or major scale are considered significant in EIA terms. Consideration has also been given to the duration of the effect, i.e. short term (< 5 years) or medium term (5-10 years) and temporary, or long term (>10 years) and permanent.

The nature of the effect has been described, as follows:

- i. Beneficial An advantageous effect to a receptor;
- ii. Adverse A detrimental effect to a receptor; and
- iii. Neutral An effect that is on balance both beneficial and adverse.

In some instances, Negligible may be used on its own without a corresponding nature of effect. This is the case when achieving an absolute value or target. Whether the effect is direct, indirect or secondary has also been considered.

Spatial scope

The study area for which the assessment of the proposed development is reviewed is at the ward level. Contextual data from the borough, regional and national level has been provided for comparison. The spatial levels are defined by the following:

- i. Ward Thorpe Hamlet
- ii. Borough Norwich
- iii. Regional East Anglia (East of England)
- iv. National England

The assessment has been based on the scheme information and planning application drawings provided by the client.

The following sections address the assessment methodologies that have been applied to the

13.2.4.1 Demolition and Construction Stage

i. Assessment of the employment expected to be generated by the demolition and construction works is undertaken by using the capital construction cost provided by the Applicant's quantity surveyors and applying a ratio of the total value of construction work to construction labour, as provided in the latest published results of the Annual Business Survey (ABS)⁶. The scale of demolition and construction employment is a direct function of the scale and type of construction project being undertaken, which in turn is reflected in the overall capital construction costs. Thus, it is generally accepted that the scale of employment is a direct function of the overall capital construction costs. To calculate the demolition and construction employment generation, the ratio of total UK annual construction costs compared to total UK annual construction employment as provided in the ABS is applied to the proposed development's capital construction cost. This gives total demolition and construction employment for the proposed development assuming a single year of construction which was then pro-rated to account for the construction period duration; and

ii. Review of the proposed development information, including mitigation measures integral to the development proposals.

13.2.4.2 Completed Development Stage

i. Population:

- a. Population estimates has been based on the Deal Ground POS (public open space)
 calculator provided by Serruys Property Company, where the South Norfolk District
 Council Guideline Multiplier has been used to estimate population; and
- Estimation of the projected number of children that would be introduced by the proposed development has been based on the Norfolk County Council Planning Obligation Standards⁷ child yield multiplier estimates;

ii. Housing:

a. In the completed development stage, the quantum of housing brought forward will be assessed against the local authority housing target, where more than 5% of the target over the plan period is considered a large effect, between 1% – 5% is considered a medium effect and less than 1% is considered a small effect.

iii. Education:

- a. Establishment of current capacity in schools has been undertaken by reviewing the most recently available school capacity data published by the Department for Education(DfE)⁸ for primary schools within a two-mile radius of the application site and secondary schools within a three-mile radius as advised by guidance. Within Government guidance admissions to primary schools is most commonly determined based on proximity, after factors such as siblings on the roll and special needs have been taken into account; and
- b. Establishment of future capacity within the relevant school planning areas by review of the most recently available school forecast data published by the DfE. The application site is proposed to be completed in September 2038. When assessing future demand, the latest date available has been used (2025/26 for primary places and 2028/29 for secondary places);

⁶ ONS (Office for National Statistics). Annual Business Survey: UK Non-Financial Business Economy, 2019 Results.

⁷ Norfolk County Council Planning Obligation Standards, February 2022

⁸ Department for Education School Capacity and Forecast 2021

iv. Health services:

a. Estimation of the existing capacity of and demand for local primary healthcare by referring to the Healthy Urban Development Unit (HUDU) benchmark of 1,800 registered patients per NHS General Practitioner (GP) and a search of local GP surgeries using the NHS website⁹, and most recently published GP Full-Time Equivalent (FTE) data¹⁰;

v. Community facilities:

- a. The accessibility of community facilities has been based on the Town and Planning Association's 20 Minute Neighbourhood guide¹¹ for local planning authorities, stating that the maximum time people are willing to walk to meet their daily needs is a 20-minute walk or 800m round trip (therefore 10 minutes each way);
- b. A qualitative assessment has been undertaken on the change in demand for community facilities within a 10-minute walk;

vi. Recreation and open space:

a. Assessment of provision of open space and play space against the required standards as specified within the Norwich City Council Open Space Needs Assessment¹²;

vii. Employment:

- a. Calculation of employment expected to be generated by the commercial floorspace during the completed development stage by applying standard job density ratios based on the Employment Density Guide (2) published by the HCA;
- b. Assessment of additionality to consider the net effects of the proposed development's employment generation once leakage, displacement and multiplier effect have been accounted for, using the Additionality Guide¹³ published the HCA, now Homes England. The concept of 'additionality' combines the direct and indirect employment effects of a proposal against the baseline position or reference case to identify the overall 'net' effect. By undertaking an appraisal of the additional benefits using the adjustment factors from the Additionality Guide, estimations of the indirect and induced employment levels can be calculated. Three adjustment factors were applied to understand the employment arising from the operational works (leakage, displacement and multiplier, which are subsequently discussed);

viii. Health (air quality and noise):

a. Health assessment has taken the Air quality assessment (Chapter 11) and the Noise technical document outcomes to summarise the effect of the construction and operational phases on human health receptors;

ix. Tourism:

a. Given the proposed developments plans to bring forward facilities related to tourism to the area, and their relatively small scale, the assessment of impact has been undertaken qualitatively; and

⁹ NHS – find GP Services

¹⁰ NHS Digital, General Practice Workforce 2023

¹¹ 20-Minute Neighbourhoods, Town and Country Planning Association, March 2021

¹² Norwich city Council, Open Space Needs Assessment, December 2007

¹³ Additionality Guide, (Fourth Edition). s.l.: HCA, 2014

x. Crime:

- a. Review of crime risk in the area from Police UK¹⁴ to assess the reported crime in the area
- b. It should be noted the original ES chapter did not include an assessment on crime

13.2.5 Effects Not Requiring Further Assessment

The stated sections addressed are factors considered in the previous Environment Statement. No further effects have been considered.

13.3 CHANGES IN BASELINE CONDITIONS

13.3.1 ES Baseline

Upon the original 2011/2012 assessment, a baseline assessment was conducted on socio-economic conditions. The baseline assessment is summarised as follows:

- i. Population
 - a. Population in Norwich at the time of the original baseline analysis was 140,100 people
- ii. Housing
 - a. There were 5,003 dwellings in Thorpe Hamlet (neighbourhood level) and 57,179 households in Norwich (borough level) at the time of the original 2011/2012 assessment

iii. Education

a. At the time of the original 2011/2012 assessment, there was significant capacity at both primary and secondary school levels (7.3% and 14.3% capacity respectively)

iv. Health services

- a. One doctor's surgery was identified within 800 metres of the sire and another 1.1km from the site, both of which were accepting new patients
- Two dental practices were identified within 1km of the site, neither of which had capacity for new patients. The nearest practice with capacity was 1.5km from the site

v. Community facilities

- a. The nearest community hall facility to the application site is the Manor Rooms, The St, Trowse Newton, Norwich NR14 8ST, which is 450m to the South East of the application site. Other community facilities in close proximity are Jubilee Community Centre (NR1 2EX) and Piling Park Community Centre (NR1 4PA) which are 1km and 1.5km away from the application site respectively
- b. The closest library facilities are Norfolk and Norwich Millennium library (NR2 1AW) and Plumstead Road Library (NR1 4JS) both or which are approximately 2km from the application site

vi. Recreation and open space

 Extensive access to recreation and open space was available near the site with facilities for 9/10 of the open space typologies identified in PPG17 which are within 1.5km of the site (the exception being civic spaces)

¹⁴ Police UK, What's Happening In Your Area? March 2023

vii. Employment

a. 79.2% of the Norwich population were economically active, compared to 79.4% in the East of England and 76.5% in the UK

viii. Air quality

- a. Norwich City Council determined that air quality in the region of the proposed development meets Air Quality Strategy (AQS) objectives because they have not declared the region of the site an Air Quality Management Area (AQMA)
- b. Annual average concentration of nitrogen dioxide (NO2) at the four closest locations where monitoring is available shows concentration of three of the four locations is within the AQS objective (40 μ g m-3), while there is a measured exceedance of the AQS objective at one location

ix. Noise

- a. The main sources of noise affecting the site as identified during the 2011/2012 assessment were road traffic (mainly on Bracondale), the tarmac rail sidings/railhead and the asphalt plant (the rail sidings/railhead in particular) and Trowse rail bridge (near the north-west corner of the site)
- b. Dominant noise sources affecting the local area are the Lafarge railway sidings which run parallel to the western boundary of the site, the Carrow Works site (Unilever / Britvic factory) located further west of the site and various commercial warehouses (including Laurence Scott Ltd) to the north

x. Tourism

- a. Estimates direct value of tourism to the Broads as £166.6m supporting 3,107 FTE jobs
- b. Whitlingham Country Park is a tourism hotspot in the area with access to the Whitlingham Great Broad which supports the leisure marine industry

xi. Crime

a. The original ES chapter did not include a baseline assessment on crime

13.3.2 Current Baseline

The following information provides the updated baseline against which the potential impacts of the proposed development have been assessed.

13.3.2.1 Demographic Profile

13.3.2.1.1 Population

According to 2021 Census data the borough of Norwich has a resident population of 144,000 people, a reported increase in population compared to the data reported in the 2009 ONS mid-year population estimates (140,100).

According to 2021 Census data, the borough population density is 3,690 people per square kilometre, this is larger than the regional and national population density of 331 people and 434 people per square kilometre which shows evidence for Norwich being a relatively densely populated borough.

13.3.2.1.2 Age

The borough age demographics show a large proportion of the population in Norwich is made up of working age adults (70.0%) which is higher than the national and regional levels (64.1% and 62.7%

respectively). In comparison, the child and elderly population is smaller than the national and regional levels.

Table 13. 2: Age Profile

Geographic level	Child (0 – 14)	Working age adult (15	Elderly (65+)
		– 64)	
National	17.4%	64.1%	18.4%
Regional	17.6%	62.7%	19.6%
Borough	15.1%	70.0%	14.9%

13.3.2.1.3 Ethnicity

Approximately 85.7% of the residents at the ward level report themselves as being White compared to 87.1% in the borough, 86.5% across the region and 81.0% on a national level. This indicates that the neighbourhood and has a lower degree of ethnic diversity than the national level by 4.7%.

13.3.2.1.4 Deprivation

The Indices of Multiple Deprivation (IMD)¹⁵ is the principal official Government measure of the spatial distribution of deprivation across the country and provides a key ranking of local authorities. Levels of deprivation are also calculated for the local neighbourhood level.

There are seven Lower Super Output Areas (LSOAs) within the neighbourhood and the average deprivation scores across these LSOAs has been provided in this section to represent the deprivation within the neighbourhood. Each LSOA encompasses a minimum population of 1,000 residents (400 household) although typically averages 1,500 residents.

The data shows that the average of LSOAs that make up the ward of Thorpe Hamlet are within the 50% least deprived LSOAs nationally on average, with an IMD rank of 14,855 (out of a total of 32,844). As shown in Table 13. 3. The neighbourhood level only ranks within the 30% most deprived areas for 'Health Deprivation & Disability' with all other domains scoring in a relatively average decile demonstrating the relative lack of deprivation.

Table 13. 3: Deprivation Profile

Domain	Rank	Decile*			
IMD	14,855	5			
Income	16,394	5			
Employment	16,199	5			
Education, Skills & Training	16,470	5			
Health Deprivation & Disability	8,776	3			
Crime	10,396	4			
Barriers to Housing & Services	21,653	7			
Living Environment	12,632	4			
*where 1 is most deprived 10% of LSOAs in England					

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¹⁵ Ministry of Housing, Communities and Local Government, 2019. Indices of Multiple Deprivation.

13.3.2.2 Housing

13.3.2.2.1 Housing Type

The 2021 Census¹⁶ data shows that there are 5,664 dwellings of all types in Thorpe Hamlet and 64,459 at the Borough level in Norwich. The neighbourhood housing stock comprises of approximately 36% of detached, semi-detached or terraced housing. 59% of housing is comprised of a converted or shared house or block of flats. The remaining housing types at 5%, are made up of other converted buildings, commercial buildings or temporary structures.

Comparatively, 64% of dwellings at the borough level and 84% at the regional level are detached, semi-detached or terrace.

This demonstrates the relatively high proportion shared accommodation or flats in the neighbourhood.

13.3.2.2.2 Housing Tenure

In terms of tenure, approximately 38% of housing is owned outright, with a mortgage or loan or part of a shared ownership scheme. 19% of housing is socially rented while 44% is privately rented. 1% live rent free.

Comparatively, at the borough and regional level, ownership makes up 43% and 66% at the regional level, respectively. Socially rented at the borough and the regional level makes up 30% and 15% respectively. Private rented at the borough and the regional level makes up 27% and 18% respectively.

This demonstrates the relatively high amount of private rented accommodation and low level of social rented housing compared to the borough and regional level.

Based on the need for housing nationally and the low level of social rented accommodation, housing has a high receptor sensitivity.

13.3.2.3 Community Infrastructure

13.3.2.3.1 Educational data and assumptions

The school data analysis excludes privately funded schools, special educational needs (SEN) schools and pupil referral unit (PRU) schools.

13.3.2.3.2 Primary

As shown in Table 13. 4, there are 17 primary schools within 2 miles of the application site, 6 of which are within 1 mile. The nearest primary school, Trowse Primary School, is 0.33 miles away.

The most recent publicly available data for the academic year 2021/2022¹⁷ indicates that for those primary schools in close proximity to the application site (Table 13. 4) there is a net surplus capacity of 655 primary school places.

¹⁶ Office for National Statistics, 2021. 2021 Census. [Online].

¹⁷ Department for Education, 2023. School Capacity and Forecast 2021/2022. DfE. [Online]

The 17 primary schools within 2 miles of the application site are within the following primary planning areas:

i. Framingham Earl Primary Phase (ref: 9260052)ii. Norwich South Primary Phase (ref: 9260042)iii. Norwich North Primary Phase (ref: 9260012)

iv. Thorpe St Andrew Primary Phase (ref: 9260132)

Forward demand and capacity at primary level is undertaken at primary planning area level. Focussing on Norwich North Primary Phase, which contains six of the closest primary schools, Table 13. 5 presents current capacity across the relevant schools. Table 13. 5 shows that the majority of capacity is due to spaces at Trowse Primary School, the closest school to the application site, making up 60% of the net capacity places in the primary planning area.

The future forecast capacity for the two primary planning areas in which the closest schools are located (Framingham Earl Primary Phase and Norwich South Primary Phase) show in Table 13. 6 shows there is an increase in surplus capacity of 1,199 places with additional need for 6 spaces.

Using the same percentage distribution across the capacity seen as that seen in the Framingham Earl Primary Phase planning area for current data (2021/22 Table 13. 5), it is considered that approximately 695 spaces (60%) can be apportioned to Trowse Primary School.

Considering an expected child yield of 253 Early Years and Primary school place children upon full operation, there will be a surplus of 402 places.

Based on the surplus capacity at primary school level, this receptor will have a low sensitivity.

Table 13. 4: Primary school capacity for schools within 2 miles

Reference	Primary School Name	Primary	Postcode	Distance	School	Number	Net
		planning		(Miles)	Places	on Roll	Capacity
		code					
1	Trowse Primary School	9260052	NR14	0.33	210	147	63
			8TU				
2	Lakenham Primary School	9260042	NR1 2HL	0.54	420	373	47
3	Edith Cavell Academy and	9260042	NR1 2LR	0.84	210	197	13
	Nursery						
4	Lionwood Infant and Nursery	9260012	NR1 4AN	0.93	265	172	93
	School						
5	Charles Darwin Primary School	9260042	NR1 1DJ	0.99	420	359	61
6	The Free School Norwich	9260042	NR1 3NX	0.99	196	189	7
7	Tuckswood Academy and	9260042	NR4 6BP	1.26	325	265	60
	Nursery						
8	Bignold Primary School and	9260042	NR2 2SY	1.26	420	371	49
	Nursery						
9	Lionwood Junior School	9260012	NR41	1.26	360	272	88
			4HT				
10	Magdalen Gates Primary	9260012	NR3 1NG	1.77	210	198	12
	School and Nursery						
11	Mousehold Infant & Nursery	9260012	NR3 4RS	1.80	266	204	62
	School						
12	Avenue Junior School	9260042	NR2 3HP	1.84	480	468	12
13	St William's Primary School	9260132	NR7 0AJ	1.85	420	418	2
14	George White Junior School	9260012	NR3 4RG	1.86	324	312	12
15	Hillside Avenue Primary and	9260132	NR7	1.91	420	382	38
	Nursery School, Thorpe		0QW				
16	Heartsease Primary Academy	9260012	NR7 9UE	1.93	420	397	23
17	Colman Infant School	9260042	NR4 7AW	1.98	180	167	13
Total							655

Table 13. 5: Framingham Earl Primary Phase primary planning area (2021/22)

Reference	Primary School Name	Postcode	Distance	School	Number	Net
			(Miles)	Places	on Roll	Capacity
1	Trowse Primary School	NR14 8TU	0.33	210	147	63
2	Stoke Holy Cross Primary School	NR14 8LY	3.47	210	208	2
3	Poringland Primary School	NR14 7RF	3.70	420	426	-6
4	Surlingham Primary School	NR14 7DQ	4.53	91	65	26
5	Rockland St Mary Primary School	NR14 7EU	4.99	68	47	21
6	Brooke Voluntary Controlled Church	NR15 1HP	5.90	140	141	-1
	of England Primary School					
Total						105

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Reference	Primary planning area name	Primary planning code	Pupil forecast	Estimated capacity	Spare places	Additional need
1	Framingham Earl Primary Phase	9260052	4,983	5,722	1,159	0
2	Norwich South Primary Phase	9260042	1,099	1,139	40	6
Total					1,199	6

13.3.2.3.3 Secondary

As shown in Table 13. 7, there are 11 secondary schools located within three miles of the application site. The nearest of which is Notre Dame High School, which is located 0.86 miles from the application site.

The most recent publicly available data for the academic year 2021/2022⁵ indicates that for those secondary schools within a three-mile radius of the application site there is a net surplus capacity of 3,264 secondary school places.

The 11 primary schools within 3 miles of the application site are within the following secondary planning areas:

- i. Norwich South Secondary Phase (ref: 9260041)
- ii. Norwich North Secondary Phase (ref: 9260011)
- iii. Framingham Earl Secondary Phase (ref: 9260051)

Forward demand and capacity at secondary level is undertaken at secondary planning area level. Focussing on Norwich South Secondary Phase, which contains five of the closest secondary schools, Table 13. 8 presents current capacity across the relevant schools. Table 13. 8 shows that the majority of capacity is due to Hewett Academy, making up 68% of the surplus capacity in the secondary planning area.

The future forecast capacity for the secondary planning area in which the closest schools are located (Norwich South Secondary Phase) show in Table 13. 9 shows there is an increase in surplus capacity of 1,223 places with no additional need for spaces.

Using the same percentage distribution across the capacity seen as that seen in the Norwich South Secondary Phase planning area for current data (2021/22 Table 13. 8), it is considered that approximately 832 spaces (68%) can be apportioned to Hewett Academy.

Considering an expected child yield of 107 high school and sixth form secondary school place children upon full operation, there will be a surplus of 588 places.

Based on the surplus capacity at secondary school level, this receptor will have a low sensitivity.

Table 13. 7: Secondary school capacity for schools within 3 miles

Reference	Secondary School Name	Secondary	Postcode	Distance	School	Number	Net
		planning		(Miles)	Places	on Roll	Capacity
		code					
1	Notre Dame High School,	9260041	NR1 3PB	0.86	1,460	1,530	-70
	Norwich						
2	Hewett Academy	9260041	NR1 2PL	0.99	1,493	284	1,209
3	Jane Austen College	9260011	NR3 1DD	1.47	1,100	1,049	51
4	City of Norwich School, An	9260041	NR4 6PP	1.57	1,730	1,731	-1
	Ormiston Academy						
5	University Technical	9260041	NR4 6FF	1.75	600	380	220
	College Norfolk						
6	The Open Academy	9260011	NR7 9DL	2.13	770	588	182
7	Sewell Park Academy	9260011	NR3 4BX	2.30	1,500	646	854
8	Thorpe St Andrew School	9260011	NR7 0XS	2.34	1,940	1,897	43
	and Sixth Form						
9	Sprowston Community	9260011	NR7 8NE	2.59	1,850	1,515	335
	Academy						
10	Framingham Earl High	9260051	NR14 7QP	2.59	808	794	14
	School						
11	City Academy Norwich	9260041	NR4 7LP	2.85	1,100	673	427
Total							3,264

Table 13. 8: Norwich South Secondary Phase secondary planning area (2021/22)

Reference	Secondary School Name	Postcode	Distance	School	Number	Net
			(Miles)	Places	on Roll	Capacity
1	Notre Dame High School,	NR1 3PB	0.86	1,460	1,530	-70
	Norwich					
2	Hewett Academy	NR1 2PL	0.99	1,493	284	1,209
3	City of Norwich School, An	NR4 6PP	1.57	1,730	1,731	-1
	Ormiston Academy					
4	University Technical College	NR4 6FF	1.75	600	380	220
	Norfolk					
5	City Academy Norwich	NR4 7LP	2.85	1,100	673	427
6	Ormiston Victory Academy	NR5 OPX	4.63	1,249	1,256	-7
Total						1,778

Table 13. 9: Secondary School Planning Area Capacity and Additional Need (2028/29)

Reference	Secondary planning area name	Secondary planning code	Pupil forecast	Estimated capacity	Spare places	Additional need
1	Norwich South Secondary Phase	9260041	5,637	6,260	1,223	0
Total					1,223	

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13.3.2.3.4 Healthcare Facilities

Using the NHS website¹⁸ (the national database for finding primary healthcare providers), four General Practitioner (GP) surgeries have been identified within two miles of the application site. The identified GP surgeries are under the NHS Norwich Commissioning Group (CCG).

It is worth noting that The Tuckswood Surgery, Gurney Surgery and Mile End Road Surgery are part of the Castle Partnership and therefore patient data in Table 13. 10 is an average of the total number of patients across the three surgeries. The number of GPs is found on the Castle Partnership website¹⁹

For the closest GP surgery with two miles of the application site, Lakenham surgery, there is an average list size of 1,719 patients per GP²⁰. This is below the benchmark of 1,800 patients per GP, commonly used in healthcare planning and recommended by the Healthy Urban Development Unit (HUDU)²¹.

Additionally, there is a surplus capacity per GP for the three other surgeries located within 2 miles of the application site as shown in Table 13. 10.

The closest dental practice to the application site is the Andrew Brown Dental Practice (NR1 3HP) which is 1.12 km from the application site. Andrew Brown Dental Practice are taking on new NHS patients that are referred by another dentist, all other dental practices in close proximity are not taking on any new patients.

Based on the surplus capacity at the closest GP surgery and the two surgeries within close proximity and based on the acceptance of new patients at the closest dental practice, the healthcare facilities receptor has a low sensitivity.

Reference	GP Surgery Name	Practice Code	Distance (miles)	Patients on List	No. GPs (FTE)	Ratio Patients/G P	Capacity per GP
1	Lakenham Surgery	D82026	0.7	8,599	5	1,720	80
2	The Tuckswood Surgery	D82011	1.0	5,848	9	650	1,150
3	Gurney Surgery	D82011	1.0	5,848	8	731	1,069
4	Mile End Road Surgery	D82011	1.8	5,848	8	731	1,069

Table 13. 10: GP Capacity

13.3.2.3.5 Community Services

The Manor Rooms, The Street, Trowse (NR14 8ST), is the closest community centre to the application site (450 meters to the southeast of the application site). This is the only community centre which is within a 10 minute walk (800 meters) of the application site.

¹⁸ National Health Service, 2021. NHS – Find GP Services. [Online].

¹⁹ The Castle Partnership, Practice Information [Online].

²⁰ National Health Service, 2023. NHS Digital – General Practice Workforce [Feb 2023]. [Online].

²¹ National Health Service, 2009. London Healthy Urban Development Unit Model and Planning Contributions Tool. London: NHS.

There are no library facilities within a 10-minute walk (800 meters) of the application site. The closest library facilities are roughly both 2km away and they are Norfolk and Norwich Millennium library, Millennium Plain (NR2 1AW) and Plumstead Road library (NR1 4JS).

Based on the small number of community facilities within the local area, the community receptor will have a Medium sensitivity.

13.3.2.4 Open Space & Playspace

In December 2007, Norwich City Council released an Open Space Needs Assessment²². The assessment summarises the current provisions of open space, sport and recreation facilities throughout the borough.

The City of Norwich covers an area of about 3,900 Ha. At the time of the assessment, it was reported that Norwich has 500 Ha of parks and open spaces, 23 formal parks, eight local nature reserves, 33 and county wildlife sites.

The Open Space Needs Assessment states the standard for open space based on local demand is as follows:

- i. Informal amenity open space 1.0 ha per 1000 people, within 100m
- ii. Parks and gardens 0.62 ha per 1000 people, district parks within 900m, pocket parks within 600m
- iii. Natural and semi natural green space 2.46 ha per 1000 people, within 600m
- iv. Allotments 0.44 ha per 1000 people, within 600m
- v. Outdoor sports facilities 1.01 ha per 1000 people, within 3000m
- vi. Play provision for children and young people 0.16 ha per 1000 people, pre-teens within 240m, teenagers within 720m
- vii. Total 5.69 ha per 1000 people

The Norwich City Council Open Space Assessment highlights 10 typologies for open space provision. The key open space within 1km of the proposed development is Whitlingham Country Park which has parks and gardens, urban and semi-urban green spaces, outdoor sports facilities, amenity green space and provision for children. Despite the availability of Whitlingham Country Park, anecdotal evidence has suggested new housing developments could add demand to an 'already over-stressed resource'. There are a number of other open space typologies in the area as shown in the original 2011/2012 assessment baseline assessment for recreation and open space.

Based on the proximity of Whitlingham Country Park, the open space and play space receptor has a medium sensitivity.

13.3.2.5 Employment

13.3.2.5.1 Occupational Class

The 2021 Census data² shows that at the ward level, 30% of work is in high skilled occupations. This is higher than the borough level at 20%, regional level at 22% and national level at 22%.

²² Norwich City Council, Open Space Needs Assessment

High-skilled occupations include management, professional and technical occupations; mid-skilled occupations include administration, skilled trades and services; while low-skilled occupations include sales, process and elementary occupations.

13.3.2.5.2 Industry of Employment and Business Structure

Figure 1 shows the industries of employment at the neighbourhood level, borough level and regional level⁵. Within the neighbourhood, the highest percentages are in 'Retail Trade and Motor Repairs' (15%), 'Human Health & Social Work' (11%), and 'Financial & Insurance' (10%). Within the borough, the highest percentages are 'Retail Trade and Motor Repairs' (17%) and 'Human Health & Social Work' (14%). The percentages are also similar to the regional and national percentages.

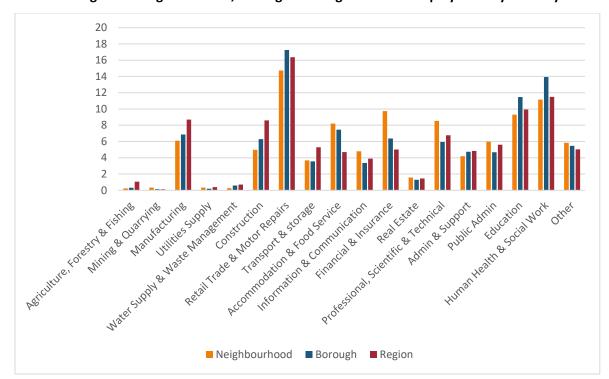


Figure 1: Neighbourhood, Borough and Regional Total Employment by Industry %

13.3.2.6 Construction

The Q4 2022 construction monitor report²³ presents positive tone with the negative trend in headline workloads easing, slightly helped by resilience of infrastructure. The main concerns among respondents are ongoing challenges regarding shortages of labour and materials alongside increasing difficulties in securing planning and financial reports.

The strongest momentum in workload is visible in infrastructure, meanwhile, the other public works category is also showing solid trend activity. Shortages in labour remain a challenge in the industry with a key problem area in terms of recruitment being for quantity surveyors. Respondents reporting financial constraint as a challenge has risen for a fifth consecutive quarter, a challenge unlikely to dissipate quickly.

²³ Q1 2023: UK Construction Monitor

Business enquiries have risen over the past quarter, and more positive momentum is reflected in the series designed to capture the likely trend in workloads over the coming year. Workloads across much of England and Wales were broadly in line (at a headline level) with that recorded in the previous iteration of the survey and marginally positive.

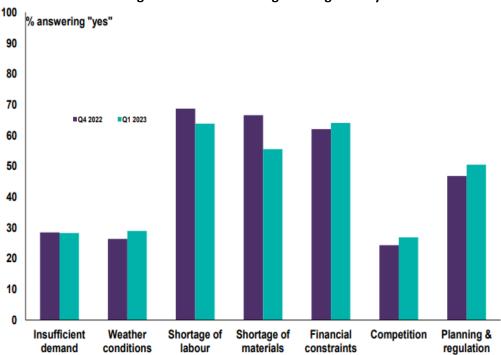


Figure 2: Factors Limiting Building Activity

13.3.2.7 Employment and Economic Activity

Economic activity relates to the percentage of the working age population that are either in employment or actively seeking employment.

The 2021 Census² data shows approximately 67.7% of the ward are economically active, this is higher than 58.8% at the borough level, 61.8% at the regional level and 60.1% at the national level. Of the economically active population (who are not full-time students) at the ward level, 6% are unemployed which is slightly higher than the 5% at borough level, 4% at the regional level and 5% at the national level.

The percentage of adult residents (16 years and older) that are educated to a degree level (or above) at ward level is 42%. This is higher than 29% at the borough level, 26% at the regional level and 28% at national level.

In the Annual Survey of Hours and Earnings (ASHE)²⁴ 2022 provisional results, the average income per year for the borough is £29,927 which is lower than the regional average and national average of £34,888 and £33,892 respectively. The average wage per week for the borough is £552, which is lower

²⁴ Office for National Statistics, 2022. Annual Survey of Hours and Earnings (ASHE) Provisional Results. ONS. [Online].

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than the regional and national level of £648 and £630 respectively. This demonstrates that average income within the borough is lower than the regional and national levels.

The data shows that there is more economic activity at the ward level compared to the borough and regional levels and lower unemployment. Additionally, a higher proportion are degree level (or above) educated at the borough level, though residents in the borough are employed in relatively low paid jobs compared to the region and nation levels.

Based on the high economic activity at the ward level and the high proportion of degree educated workers, the employment receptor has a low sensitivity.

13.3.2.8 Health

13.3.2.8.1 Air Quality

Air quality is assessed in accordance with the

- i. Local Air Quality Management Technical Guidance (TG22)
- ii. Institute of Air Quality Management (IAQM) guidance on the assessment of dust from demolition and construction
- iii. Atmospheric Dispersion Modelling System (ADMS) Roads version 5 dispersion model

With the consideration of the proposed development, the increased population will lead to an increase in road users during the operational phase, and therefore the air quality assessment assesses road traffic emission impact on human health receptors.

Despite Central Norwich being in an AQMA²⁵ as declared by Norwich City Council, the proposed development sits outside of this boundary.

Many of the objectives in the AQS were made statutory in England with the Air Quality (England) (Amendment) Regulations 2002 for the purpose of Local Air Quality Management (LAQM). The objectives for NO2 and PM10 detailed in the AQS are included in the Air Quality (England) (Amendment) Regulations and are shown in Table 13. 11.

	Table 13: 11: I dilatant	AQS Objectives	
Pollutant	Air Quality Standard	AQS Obj	ective
	Concentration (µg m-3)	Averaging period	Exceedances per
			year
Nitrogen Dioxide	200	1 hour	18
(NO2)	40	Annual	-
Particulate Matter	50	24 hours	35
(PM10)	40	Annual	-

Table 13. 11: Pollutant AQS Objectives

Considering the close proximity of the application site to an AQMA, the air quality receptor has a medium sensitivity.

²⁵ Department for Environment Food & Rural Affairs, Local Authority Details Norwich City Council, AQMAs Declared by Norwich City Council

13.3.2.8.2 Noise

The Noise assessment followed the following criteria:

- i. Internal noise levels in habitable rooms of the new dwellings assessed against BS 8233: 1999 (now 2014) and World Health Organisation (WHO) guidelines for community noise (1999).
- ii. External amenity areas assessed against WHO guidelines

The following approach to the assessment has been made:

- i. Road traffic predicted based on future transport projects for Bracondale (and possibly Whitlingham Lane, although this is a relatively quiet road)
- ii. Tarmac railhead/rail sidings attended survey (s) to measure/verify typical noise levels from trains coming in/out of the sidings and from aggregate unloading activities (and asphalt plant if this can be measured, though we expect this to be much quieter than rail activities).
- iii. Trowse rail bridge unattended monitoring in the north-west corner of the site over at least 3-5 days to confirm average/maximum noise levels from trains passing over the rail bridge. We would also measure noise levels from general rail traffic near the west boundary, north of the railhead, though this was not previously noted as a particularly significant noise source.

The other source of noise identified in the 2011/2012 assessment was the Carrow Works site, which was sold to a property developer in 2020, removing this as a significant noise source.

Based on the sources of noise exposure and the removal of the Carrow Works site means that the noise receptor will have a low sensitivity.

13.3.2.9 Tourism

The latest data from Economic Impact of Tourism report for Norfolk 2020 shows that the total value of tourism in Norfolk was £1.5bn which was a drop from 2019 figures of £3.4bn. This drop could be attributed to Covid-19 and the impact the pandemic had on the tourism sector, and therefore 2019 figures may be a more accurate representation. Tourism supported 43,414 FTE jobs in 2020, a reduction from 2019 figures of 69,266 FTE jobs.

The majority of tourism facilities such as restaurants, museums, hotels and other things to do are located in the city centre of Norwich whereas the proposed development sits outside the city centre; however, the proposed development is a 30-minute walk from Whitlingham Country Park which provides access to tourist facilities.

Considering the effect of tourism on the local population, tourism is a medium sensitivity receptor.

13.3.2.10 Crime

Crime imposes economic costs, reinforces social exclusion and can hasten the environmental decline of neighbourhoods, as fear of crime can make people reluctant to walk, use public transport, or go out after dark; and can be a cause of mental distress and social exclusion. In particular, women and older

people tend to worry more about becoming victims and this may prevent them from engaging in social activities²⁶.

Not everyone is at equal risk of becoming a victim of crime. People who suffer from poor health are more likely to be victims of crime than those in good health²⁷. However, this may be because of the association of disadvantage with victimisation and poor health, rather than poor health causing victimisation. Young men, as well as being the most common perpetrators of crime, are also the most likely victims of street crime, especially physical assaults²⁸. Older people, especially women, are more likely to be victims of theft from the person, with much acquisitive crime, such as shoplifting and burglary, committed by drug-misusing offenders.

Studies have shown that perceived dimensions of neighbouring, such as neighbourhood attachment and annoyance, are influenced by the environmental attributes of the neighbourhood, such as surveillance, visual appearance and dwelling density²⁹. Thus, socio-economic characteristics of the occupants and the physical form of the environment can affect neighbourhood problems and by extension site users' perceptions and attitudes towards crime.

Table 13. 12 provides a summary of reported crime types in the Norwich East police force area for March 2023, of which there were 760³⁰ reported crimes in total. The most common type of reported crime in the local area is violence and sexual offences (34.3%), with anti-social behaviour (15.70%) being the second most common crime.

According to Crime Rate UK, there are 74 crimes per 1,000 people at the regional level, while there are 106 crimes per 1,000 people at the borough level.

Table 13. 12: Recorded Crime Types in Norwich East (March 2023)

Crime Types	Total	Percentage
Anti-social behaviour	261	34.30%
Burglary	119	15.70%
Criminal damage and arson	81	10.70%
Drugs	72	9.50%
Other theft	61	8.00%
Public order	46	6.10%
Shoplifting	34	4.50%
Vehicle crime	21	2.80%
Violence and sexual offences	16	2.10%
Other crime	13	1.70%
Bicycle theft	12	1.60%
Robbery	11	1.40%

²⁶ Public Health England, 2011. Indicator 4.4 – Number of domestic burglaries recorded per 1000 households. London: LHO.

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²⁷ Victim Support & Mind, 2013. At risk, yet dismissed. London: Victim Support & Mind

²⁸ Health & Social Care Information Centre, 2014. Indicator 4.2 – Number of vehicle crimes recorded per 1000 population. London: HSCIC.

²⁹ Marzbali, M., et al. The influence of crime prevention through environmental design on victimisation and fear of crime. Journal of Environmental Psychology.

³⁰ Police UK. What's happening in your area? [Online], March 2023

Possession of weapons	10	1.30%
Theft from the person	3	0.40%
Total	760	100%

Based on the crime per person at the borough level and severity of crimes being committed, crime has a medium receptor sensitivity.

13.3.3 Changes in Baseline

Following the baseline analysis of the socio-economic characteristics, the following changes have been identified:

- i. Population: there has been an increase in the population for the borough of Norwich from 140,100 people to 144,000 people, a 2.8% increase
- ii. Housing: there has been an increase in housing at the neighbourhood level from 5,003 to 5,664 (13.2% increase) and an increase at the borough level from 57,179 to 64,459 (12.7% increase)
- iii. Education: a surplus of capacity still exists at the primary and secondary level both currently and in the future
- iv. Health services: the closest GP surgery is 0.7 miles (1.1km) from the site which has surplus capacity; however, this is limited. Two more GP surgeries identified 1 mile (1.6km) from the site have a high surplus capacity
- v. Community facilities: there has been no change in the baseline for community facilities (community centres and libraries) since the original ES assessment
- vi. Recreation and open space: there have been no changes in the baseline analysis for recreation and open space with the key open space, Whitlingham country park, still an accessible facility
- vii. Employment: Economic activity has dropped at the ward, borough, regional and national levels since the original 2011/2012 assessment. The fall in economic activity may be attributed to the Covid-19 pandemic. The national level of economic activity fell from 79.2% to 60.6% (reduction of 15.9%). At the borough level, economic activity fell from 79.2% to 58.8% (reduction of 20.4%) and fell at the regional level from 79.4% to 61.8% (reduction of 17.6%).
- viii. Air quality: the air quality standards have not changed since the original ES chapter and the proposed development still sits outside of an AQMA
- ix. Noise: The site location is still affected by the same sources of noise as identified in the original 2011/2012 assessment with the exception of the Carrow works site which was sold to a property developer in 2020, removing these as a source of noise
- x. Tourism: Tourism is still a large part of the area, with the Broads being a major attraction to the area as well as the rivers and waterways that surrounds it. Whitlingham Country Park, which has access to two Broads, is still a local facility and provides a range of water and land-based recreation as well as an education centre, nature walks and a restaurant.
- xi. Crime: Crime was not originally assessed as part of the original ES

ASSESSMENT OF EFFECTS

13.3.4 Construction Phase Effects

13.3.4.1 Generation of Direct Construction Employment

Construction employment is important as it represents part of the continual supply of work that construction firms, and local tradesmen, rely upon. Without such schemes, construction and related employment opportunities can be substantially reduced.

The scale of construction employment is a direct function of the scale and type of construction project being undertaken, which in turn is reflected in the overall capital construction costs. Thus, it is generally accepted that the scale of employment is a direct function of the overall capital construction costs.

To calculate construction employment, data from the annual business survey (ABS) has been used. The development programme for the proposed development is set to begin in January 2024 and last until September 2038. Based on this, we have assumed the project would last for 129 months. The total employment over a 12-month term would be for approximately 595 construction jobs, based on the capital construction costs (dependent on the market requirements at the time of construction). The gross total average employment generated would be approximately 57 construction jobs over the duration of the construction phase.

13.3.4.2 Indirect and Induced Construction Employment

Further to the direct employment generated from the construction of the proposed development, additional benefits would result from the construction stage. These secondary effects would arise from the need to purchase supplies for the proposed development (indirect employment), and from the increased expenditure in the locality by the construction workers (induced employment). Together this beneficial economic multiplier effect would sustain and generate further economic activity in the area boosting the local economy.

As previously mentioned, by undertaking an appraisal of the additional benefits using the adjustment factors from the Additionality Guide (2), estimations of indirect and induced employment levels can be calculated. Three adjustment factors have been applied to understand the employment arising from the construction stage:

- Leakage. First, a leakage factor is applied; this estimates the proportion of outputs that benefit those outside the target area, which is the borough. In this case, in accordance with guidance, a medium level of leakage has been assumed at 25%, i.e. 75% of benefits would be retained within the neighbourhood and borough area. This has been informed by the average level of construction employment at the borough compared to the regional average.
- Displacement. The second adjustment factor that is applied is displacement. Displacement takes
 into account the proportion of development outputs accounted for by reduced outputs
 elsewhere. In respect to construction, this may result in competition for construction staff that
 could result in delays and increased costs. Located on the outskirts of the town centre, the
 development would not experience competition for construction and therefore the
 displacement would be low, this has been estimated at 25%.

• Multiplier. Finally, a multiplier adjustment factor is applied; this calculates the secondary (indirect and induced) benefits as a result of the construction stage, as previously discussed. The multiplier adjustment factor varies according to the project size and geographic area; the larger the project and geographic area under construction, the greater the multiplier factor. Due to the proposed development's size and the duration of the construction programme, it is considered to be medium at a borough level of influence. Therefore, a borough composite multiplier of 1.10 has been applied.

Thus, as set out in Table 13. 13 below, the adjustment factors have been applied and the net additional employment generated during the construction works arising as a consequence of the proposed development is 35 indirect employment opportunities over 129 months.

Table 13. 13: Additionality Assessment – Annual Construction Employment over Construction

Duration

Additionality Steps	Additionality Application
Gross direct construction employment	57
Estimated leakage	14
Gross direct construction employment to a target area	43
Estimated displacement	11
Net direct construction employment to target area	32
Estimated multiplier effect	3
Net construction employment to target area	35

Considering the baseline assessment of employment at the neighbourhood and borough level, employment is medium sensitivity receptor. Due to the number of direct (57) and indirect (35) construction opportunities there is a medium magnitude of impact.

Based on a medium sensitivity and a medium magnitude of impact, the proposed development would result in a temporary minor beneficial effect during construction stage at borough level.

13.3.5 Additional Operational Phase Effects

13.3.5.1 Proposed development Forecast Population

13.3.5.1.1 Total Population

The proposed development would deliver 670 dwellings. Table 13. 14 demonstrates the indicative housing mix for the proposed development based on the scheme information provided by the client.

Table 13. 14: Housing Provision

Туре	1 bed	2 bed	3 bed	4 bed	5 bed	Total
Market Housing	107	215	253	47	21	643
Social Rent	2	12	11	2	0	27
Total	109	227	264	49	21	670

53.8

Based on the Deal Ground POS (public open space) calculator provided by Serruys Property Company, the South Norfolk District Council Guideline Multiplier has been used to assume a population of 1,510 people.

13.3.5.1.2 Child Population

Total

Based on the Norfolk County Council Planning Obligation Standards³¹ the child yield formulae are shown in Table 13. 15 (assumes 100 dwellings). It should be noted that the Norfolk County Council's multipliers assume that there will be no children from one bedroom accommodation and that there will be a 50% reduction for flats/apartments.

No. Year Cohorts Multiplier Age range Early years 2 - 49.7 2 Primary school 4 - 117 28.1 5 High school 11 - 1614.5 Sixth form 16 - 182 1.5

Table 13. 15: Child Yield Formula

Using the housing mix assumptions, the child yield is presented in Table 13. 16.

	1 UDIC 13: 10: C	ilia ricia	
	Dwellings	Multiplier	Total Child Yield
Early years	670	9.7	65
Primary school	670	28.1	188
High school	670	14.5	97
Sixth form	670	1.5	10
Total		53.8	360

Table 13, 16: Child Yield

13.3.5.2 Operational Employment

The proposed development would support operational jobs directly and indirectly. There are currently no existing jobs on-site. It is anticipated that the Proposed Development will bring forward up to 1,974 sqm (gross internal) of employment use class. This floorspace would include a mixture of E class units or 'any services which it is appropriate to provide in a commercial, business or service locality'. Table 13. 17 indicates the advised floorspace and asset unit types calculated to determine employment impact.

Table 13, 17: On-site Employment Benefits Land Use

Asset Use Class	Area NIA sqm
A3 Restaurant and Cafes	1,005.01
A1 Retail	968.63
	1,973.64

To estimate the number of operational jobs that might be accommodated on-site as a result of the Proposed Development, employment density estimates from the HCA Employment Density Guide have

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³¹ Norfolk County council Planning Obligation Standards. February 2022.

been used. When employment densities are represented as a range, as set out within the Employment Density Guide, the minimum density has been used to ensure a conservative assessment. The HCA use former asset use classifications and therefore both former and new use classes are used in Table 13. 18.

Table 13. 18: Homes and Community Agency Employment Densities Land Use Type

New Use Class	Former Use Class	Density (person per sqm)	Area NIA sqm
E - Restaurant	A3 Restaurant and Cafes	person per 15-20 sq m	1,005.01
E - Shop	A1 Retail	person per 15-20 sq m	968.63
			1,973.64

Based on the figures provided by the Applicant and the standard employment densities for the stated spaces, the proposed development would create an estimated 99 FTE jobs.

To ascertain the net direct and indirect employment benefits to the target area of the local authority, an additionality assessment has been undertaken. As with the Construction Phase, to estimate the net additional employment impact at each spatial level, adjustments need to be made for leakage and displacement, along with the above allowance for multiplier effects. As shown in Table 13. 19 the proposed development is considered to result in 61 net operational employment opportunities. Therefore, it is considered that the proposed development will result in a Medium Magnitude of Impact.

Table 13. 19: Additionality Assessment – Annual Operational Employment over Operational Duration

Additionality Steps	Additionality Application
Gross direct operational employment	99
Estimated leakage	25
Gross direct operational employment to a target area	74
Less displacement	19
Net direct operational employment to target area	56
Plus multiplier effects	6
Net operational employment to target area	61

Based on a low sensitivity and a medium magnitude of impact, the proposed development would result in a minor beneficial effect during operational stage at borough level.

13.3.5.3 Housing

According to the Strategic Housing Market Assessment 2015, an objectively assessed need for 70,483 dwellings over the 24-year period of 2012 – 2036 is required, which is an annual average of 2,937 dwellings, 26% of which should be affordable housing. The delivery of 670 dwellings would represent 0.95% of the total target for the plan period, 4% of which is affordable housing (social rent). As the threshold for a medium impact is 1%, it is considered that the proposed development creates a small to medium magnitude of impact.

Based on the high sensitivity of the housing stock and the small to medium magnitude of impact at the borough level, it is considered that the proposed development would result in a minor beneficial or negligible effect.

13.3.5.4 Community infrastructure - Education

The proposed development's forecasted child yield will result in an increased demand for school places. The proposed development would yield 360 school aged children, made up of 65 early years children (aged 2-4), 188 primary aged children (aged 4-11) and 107 secondary aged children (aged 11-18).

13.3.5.4.1 Primary

Baseline data analysis of the primary schools within two miles of the site indicates there is a surplus in capacity of school places at primary age, resulting in a low receptor sensitivity.

Assuming a maximum class size of 30 children, there would be a resulting need for 8.4 classes (assuming an increase in 253 children of early years or primary years aged) resulting in a large magnitude of impact. It should be noted that the demand for classes is spread across the primary age groups.

Considering the surplus capacity as highlighted in the baseline assessment and the demand for primary school places, there would be a minor adverse impact on primary aged places at the ward level.

13.3.5.4.2 Secondary

Baseline data analysis of the secondary schools within three miles of the site indicates there is a surplus in capacity of school places at secondary age, resulting in a low receptor sensitivity.

Assuming a maximum class size of 30 children, there would be a resulting need for 3.6 classes (assuming an increase in 107 children of secondary year age) resulting in a large magnitude of impact. It should be noted that the demand for classes is spread across the secondary age groups.

Considering the surplus capacity as highlighted in the baseline assessment and the demand for secondary school places, there would be a minor adverse impact on primary aged places at the ward level.

13.3.5.5 Community infrastructure - Healthcare

Baseline data indicates there is one doctor's surgery within 0.8 mile of the application site with 5 FTE GPs with a surplus of capacity. There are two GP surgeries within 1 mile of the application site, one with nine GPs and the other with eight GPs, both of which have a surplus of capacity. There is one more GP surgery within 1.8 miles of the application site with 8 FTE GPs. Considering the surplus capacity across the four GP surgeries located near the application site, the supply of per GP capacity will exceed the increased demand for GPs. Based on this information, CBRE consider the demand for healthcare to have a low sensitivity.

Considering a population increase of 1,510 people, there would be additional demand for 0.83 GPs (assuming 1,800 patients per GP). Based on this assumption, the magnitude of impact would be considered medium.

Based on the low sensitivity of the receptor and the medium magnitude of impact, upon delivery of the application site, there would be a minor adverse effect on the demand for healthcare.

13.3.5.6 Community infrastructure – Community facilities

Baseline data indicates there is only one community centre within a 10-minute walk (800 meters) which would sufficiently serve the incoming population. There are two more community centres within 1.5 km which could address any additional need for community centres.

While there are no library facilities within a 10-minute walk, there are two community libraries which are equidistant from the application site and would serve the needs of the incoming population.

Based on the medium sensitivity of the community facilities highlighted in the baseline analysis and a small magnitude, there will be a minor adverse effect on community facilities.

13.3.5.7 Open space and play space

Based on the Deal Ground POS (public open space) calculator provided by Serruys Property Company, the South Norfolk District Council Guideline Multiplier has been used to assume a population of 1,510 people.

Based on the Deal Ground POS (public open space) calculator provided by Serruys Property Company, it can be identified that for informal amenity open space, parks & gardens the onsite provision will meet the open space standard requirement as set out in the Norwich City Council Open Space Needs Assessment. While there is a provision for Natural Green Space and Allotments, this will not meet the standard requirement.

Based on the Deal Ground POS calculator, it can be identified that play provision for children and young people will meet the play space standard requirement as set out in the Norwich City Council Open Space Needs Assessment.

Typology Quantity standard Demand created On-site provision (ha per 1,000 from proposed (ha) population) development (ha to support 1,510 people) Informal Amenity Open Space 1 2.60 1.51 0.93 1.17 Parks & Gardens 0.62 Natural Green Space 2.46 3.72 2.16 Allotments 0.44 0.66 0.07 Play provision for children and young 0.16 0.24 0.25 people Natural green space – County wildlife site 0 0 6.99

Table 13. 20: Public Open Space

Based on the high sensitivity of open space as highlighted in the baseline analysis and the small magnitude of impact, there will be a minor beneficial or negligible effect.

Based on the high sensitivity of the play space as highlighted in the baseline analysis and a small magnitude, there will be a minor beneficial or negligible effect.

13.3.5.8 Crime

In consideration of the required elements for a conjunction of criminal activity (CCO): a likely offender and a suitable target come together in a conducive place; it is considered that the application site, with the increased population and open space provision would provide suitable targets and therefore, there is the potential for crime to be committed.

Even though introducing a new population will also introduce targets, the proposed development will be designed with security in mind, at the detailed design (Reserved Matters) stage, in order to meet the broad requirements of Secured by Design (SbD) standards and deliver high-quality public realm. The proposed development will have a beneficial effect on safety and perceptions of security by increasing activity on-site, reducing vacancies and increasing levels of natural surveillance. It is worth noting that residents who move into the new development would see the SBD principles integrated in the design from the outset. As such, it is considered that the proposed development is likely to be less conducive to crime and consequently, the current high levels of crime may be lowered.

The Secured by Design Safer Places Report states that crime and fear of crime can be reduced 'by designing the wider environment through layout of housing estates, city centres and transport interchanges, to avoid concentration of attractive targets, to reduce conflicts; and to make surveillance and pursuit of offenders easier, and concealment and escape harder'.

Based on the medium sensitivity of the local crime rates and the small magnitude of impact, the safety and security design interventions are considered to result in a minor beneficial effect at a neighbourhood level.

13.3.5.9 Air quality

Air Quality has been analysed against the effects on human health in the Air Quality assessment in Chapter 11. This chapter of the ESA considered the predicted effects of the original ES, and the current and future baseline, in the context of the material amendments and updates to guidance.

The following air quality parameters were assessed:

- i. Assessment of dust generated during the construction phase;
- ii. Assessment of emissions from construction plant, as non-road mobile machinery; and
- iii. Assessment of road traffic emissions associated with operational phase development trips

Through good practice and implementation of appropriate mitigation measures, it is expected that the release of dust would be effectively controlled and mitigated, with resulting impacts considered to be 'not significant'. All dust impacts are considered to be temporary and short-term in nature. Emissions from plant / NRMM on-site is predicted to result in a 'not significant' impact on air quality.

Additional development trips arising during the operational phase of the scheme are predicted to result in a negligible impact on annual mean NO2, PM10 and PM2.5 concentrations at all human receptor locations. There are no predicted exceedences of the annual mean NO2, PM10 and PM2.5 AQALs at proposed receptor locations of relevant exposure introduced by the Proposed Development. There is no predicted risk of exceedence of the 1-hour mean NO2 or 24-hour mean PM10 AQALs at existing or proposed receptors as a result of the Proposed Development.

Considering the medium sensitivity of the receptor and the small magnitude of impact, the proposed development will have a negligible effect on air quality in the local area.

13.3.5.10 Noise

During the construction phase there will be a temporary adverse effect on the local residents due to construction noise.

Noise has been analysed against the effects on human health in the Noise technical report by Adrian James Acoustics. The following conclusions were drawn:

- i. The main noise source affecting the residential areas will be trains travelling on the Great Eastern Main Line and from plant and activities from Trowse Depot.
- ii. Noise from Trowse Rail Bridge is most significant, and the maximum noise levels produced by night-time trains will dictate the building envelope requirements for some residential buildings in the Wensum Riverside area.
- iii. Noise from Trowse Depot is also significant, and average noise levels from plant and activities associated with deliveries will dictate building envelope requirements in parts of the Marsh Reach area.
- iv. Good acoustic design principles have generally been followed in the proposed development layout, particularly in terms of the use of buffer zones and the use of buildings nearest to the main noise sources to screen other buildings further away. There is not much that the developer can to do mitigate noise at source because it would be impractical and/or outside their control.
- v. Daytime average noise levels in outdoor amenity areas should generally comply with relevant guideline criteria. There will be some exceedances of the upper guideline limit closest to the main noise sources, but residents in all of these areas will have access to other (shared) outdoor amenity areas where average noise levels will be much lower.

Based on the evidence of assessment completed by Adrian James Acoustics, during the operational phase there would be a medium magnitude of impact.

Based on the low sensitivity of the noise receptor and the medium magnitude of impact there would be a minor adverse effect on health from noise.

13.3.5.11 Tourism

The proposed development will bring forward a relatively small amount of restaurant and shop space (1,005 sq m and 557 sq m respectively). It's likely that the majority of custom the restaurant and retail space receive will be from the population brought forward by the proposed development. Whilst tourists visiting the Broads may visit the proposed development's restaurant and retail offer, it is considered unlikely that this would be a significant contribution to their custom and as such is considered to be not be a significant proportion of the likely income generation.

Whilst the regeneration of the application site will make it more attractive for visitors, it is considered unlikely that the proposed development would become a tourist destination in its own right, given the lack of specific tourist facilities. Therefore, it is considered that the proposed development would result in a small magnitude of impact.

Considering the medium sensitivity of the receptor and the small magnitude of impact, the proposed development will have a minor beneficial to negligible effect on tourism in the local area.

13.3.6 Evaluation of Predicted Impacts

13.3.6.1 Housing

Based on the high sensitivity of the housing stock and the small to medium magnitude of impact at the borough level, it is considered that the proposed development would result in a minor beneficial permanent effect. Based on the assessment of effects, there is no need for mitigation.

13.3.6.2 Education

Given the number of primary aged children likely to reside in the proposed development in comparison to the existing capacity identified, the surplus capacity as highlighted in the baseline assessment would result in a minor adverse impact on primary aged places at the ward level.

Given the number of secondary aged children likely to reside in the proposed development in comparison to the existing capacity identified, the surplus capacity as highlighted in the baseline assessment would result in a minor adverse impact on secondary aged places at the ward level.

Mitigation could be considered via section 106 agreements.

13.3.6.3 Healthcare

Based on the increased population being brought forward, upon completion there will be a minor adverse effect on the demand for healthcare. Mitigation could be considered via section 106 agreements.

13.3.6.4 Open space and play space

Based on the high sensitivity of open space as highlighted in the baseline analysis and the small magnitude of impact, there will be a negligible effect. Based on the high sensitivity of the play space as highlighted in the baseline analysis and a small magnitude, there will be a minor beneficial effect. Based on the assessment of effects, there is no need for mitigation.

13.3.6.5 Construction employment

Considering the medium sensitivity of the receptor and a small magnitude of impact from construction jobs brought forward, there will be a minor beneficial effect on construction employment.

13.3.6.6 Operational employment

It is considered that the proposed development will result in a minor beneficial effect for employment during the operational phase at a local authority level. Based on the assessment of effects, there is no need for mitigation.

13.3.6.7 Air Quality

During the construction phase, air quality will have a minor adverse effect on health receptors. During the operational phase, air quality will have a negligible effect on health receptors.

Required embedded mitigation has been set out in the Air Quality assessment chapter.

13.3.6.8 Noise

During the construction phase, noise will have a minor adverse effect on health receptors. During the operational phase, noise will have a minor adverse effect on health receptors. Required embedded mitigation has been set out in the Noise assessment chapter.

13.3.6.9 Tourism

Considering the high sensitivity of the receptor and the small magnitude of impact, the proposed development will have a negligible effect on tourism in the local area. Based on the assessment of effects, there is no need for mitigation.

13.3.6.10 Crime

Based on the medium sensitivity of the local crime rates and the small magnitude of impact, the safety and security design interventions are considered to result in a minor beneficial effect at a neighbourhood level. Based on the assessment of effects, there is no need for mitigation.

13.3.7 Additional Cumulative Effects

This section assesses the likely effects of the proposed development in combination with other cumulative schemes within the local area.

Following a review of the five cumulative schemes identified, four have been considered in respect of the cumulative socio-economic effects where socio-economic details were available. The following cumulative schemes have considered for the combined cumulative effects in respect of the proposed development:

Table 13. 21: Socioeconomics: Inter development Cumulative Effects Assessment: Cumulative Scheme Screening

Cumulative scheme	Potential for cumulative effects?	Considered within assessment?
2019/2318 Phase 2, Land off White Horse Lane, Trowse	Erection of 83 dwellings, vehicular access, landscaping, open space and associated infrastructure Received full planning permission (ref. 2019/2318) in December 2020. Work commenced on Phase 2 in February 2021	Yes – relevant details provided below. Unit number: 83 Population: Unknown Operational employment: Unknown Primary aged children: Unknown Secondary aged children: Unknown Open space/playspace: Unknown
2022/2148 Land north of Caistor Lane	Hybrid Application: Part 1. Detailed proposals for a 25.5 hectare country park together with associated infrastructure. Part 2. Outline proposals with all matters reserved, except for access, for a residential development of up to 180 no.	Yes – relevant details provided below. Unit number: 180 Population: Unknown Operational employment: Unknown

Cumulative	Potential for cumulative effects?	Considered within assessment?
Caistor St Edmund	dwellings, serviced site for a new 420 place primary school, serviced site for a new community building, Step 7 FA Standard football pitch and a package of improvements to Caistor Lane. This application is currently pending decision after the Parish Councils submitted objection.	 Primary aged children: Unknown Secondary aged children: Unknown Open space/playspace:
22/00434/F Anglia Square	Hybrid (Part Full/Part Outline) application for the comprehensive redevelopment of Anglia Square, and car parks fronting Pitt Street and Edward Street for: up to 1,100 dwellings and up to 8,000sqm (NIA) flexible retail, commercial and other non-residential floorspace including Community Hub, up to 450 car parking spaces (at least 95% spaces for class C3 use, and up to 5% for class E/F1/F2/Sui Generis uses), car club spaces and associated works to the highway and public realm areas	Yes – relevant details provided below. Unit number: 1,100 Population: Unknown Operational employment: 288 FTE jobs Primary aged children: 32 Secondary aged children: 57 Open space/playspace: 1.6 hectares (4 acres) of public open space
17/01647/VC Land north of Carrow Quay	Variation of Condition 1 of previous permission 13/01270/RM to allow revised plans. [13/01270/RM Reserved Matters with full details of external appearance, landscape, layout and scale of development, to provide 250 No. residential flats (Class C3), 113sqm offices (Class B1a), 279sqm groundsman's facilities (Class B8), and 401sqm of flexible office space (Class B1a) and community uses (Class D1/D2) with 126 No. parking spaces, associated highways works and provision of a Riverside Walk, consequent to previous outline planning permission 11/02104/O 'Outline application with full details of access for residential-led development of between 200 and 250 No. residential flats (Class C3) and 140 No. car parking spaces with commercial office space (Class B1a), groundsman's facilities (Class B8), community uses (Class D1/D2) and associated works including Riverside Walk and access road'. The proposals include details for approval of Conditions 1(a), 1(b), 2(b), 3, 4(a), 4(b), 4(c), 5, 6, 7, 8(a), 8(b), 12, 20, 22(a), 22(b), 22(c), 22(e), 25, 26, and 30(a) of outline planning permission 11/02104/O applicable to the form of development as proposed in these Reserved Matters]	Yes – relevant details provided below. Unit number: 250 Population: Unknown Operational employment: Unknown Primary aged children: Unknown Secondary aged children: Unknown Open space/playspace: Unknown Additional socio-economic information is not provided within the planning statement

Cumulative scheme	Potential for cumulative effects?	Considered within assessment?
22/00540/EIA2	EIA Scoping Request for environmental consultancy associated with the proposed	No
Carrow Works,	development of the site.	
King Street		

Cumulative effects are predominantly considered relevant in socio-economic terms regarding construction employment creation, operational employment creation, demand for school places at both primary and secondary levels, demand for primary healthcare provision, demand for open space and play space and consideration of crime.

13.3.8 Construction Phase

Based on the information that is publicly available, it is possible that the construction stages of all of the cumulative schemes would overlap with that of the amended proposed development.

i. Construction employment: For general construction employment this is considered to result in a minor cumulative effect. However, with the likely overlap in construction stages of the cumulative schemes there is potential for apprentices to move between schemes and complete their apprenticeships within the local authority area. These are particularly beneficial as many apprenticeships require a three-year duration which can be difficult to achieve on shorter duration build projects. Therefore, having overlapping projects within the local authority area has a Minor-moderate Beneficial cumulative effect.

13.3.9 Operational Phase

- ii. Operational employment: In addition to the operational jobs to be generated by the proposed development, the selected schemes would bring forward at least an additional 288 operational employment opportunities. It is considered that the schemes bringing forward operational employment opportunities, through commercial space, would deliver beneficial effects for the local area. Therefore, it is considered that this would be a Moderate Beneficial cumulative effect, which is not considered significant.
- iii. Housing: The proposed development will create a direct, long term permanent minor beneficial residual effect at the district level in relation to the provision of new homes. The committed cumulative schemes are estimated to generate around 1,613 additional units; the impact will be commensurately greater. The contribution to the housing stock in general will be a moderate beneficial impact, which is significant.
- iv. Education: Provided the information available, the advised cumulative schemes do not provide additional educational facilities. Despite the surplus provision of primary and secondary school places available in the local area, the cumulative effect on education capacity is considered to remain Minor Adverse.
- v. Healthcare: Considering the cumulative schemes, the impact on healthcare facilities is moderate adverse. Therefore, there may be a significant effect on GP services and increased demand for healthcare facilities

- vi. Open space and play space: Although additional housing brought forward by the cumulative schemes would increase the demand on open space, particularly on Whitlingham Country Park, it is considered that collectively the cumulative schemes would bring forward new open space and plays pace in the local area either through provision on-site and/or financial contributions creating beneficial effects. As such, the cumulative effect would remain as Minor Beneficial both for open space and playspace.
- vii. Crime: It is considered that crime would be dealt with appropriately within each cumulative scheme in response to the local requirements. Therefore, it is considered that this would remain as a Minor Beneficial cumulative effect, which is considered not significant.
- viii. Health: In terms of air quality and noise, given the proposed construction time periods, it is unlikely there will be cumulative effects associated with dust or noise that will affect the same receptors at the same time. In relation to the cumulative effects, the implementation of the proposed mitigation measures (including CEMP) will help reduce effects on individual sensitive receptors such that cumulative effects are unlikely to occur. There may be a cumulative beneficial effect associated with creating demolition and construction jobs, although no significant effects on human health is anticipated.
- ix. Tourism: The proposed development and cumulative schemes will have a negligible effect on tourism.

13.4 REQUIREMENT FOR ADDITIONAL MITIGATION

13.4.1 Alternate or Additional Mitigation

The following mitigation measures that have been proposed in order to address the effects identified, as well as the effectiveness of those measures, and how they would be secured. Possible enhancement measures have also been identified where relevant.

13.4.1.1 Construction employment

To maximise local recruitment, enhancement measures would include commitment to advertise job vacancies in local job agencies and newspapers in accordance with 'local and relevant postcodes' to maximise those employed locally. This would be secured through the planning condition. The contractor would be required to work with local education and training centres, and industry bodies, to provide apprenticeships and training opportunities, particularly for those in the NEET category (not in employment, education or training). Given the duration of the construction phase, the proposed development offers opportunity for prolonged training.

13.4.1.2 Operational employment

No mitigation is required for the generation of new operational employment.

13.4.1.3 Housing

No mitigation is required for the generation of new housing.

13.4.1.4 Education

In the context of the proposed development and the cumulative schemes, considering the capacity at the primary and secondary levels, it is considered necessary to provide additional mitigation. Mitigation

in the form of section 106 financial contributions should be sought to alleviate the demand of primary and secondary educational facilities.

13.4.1.5 Healthcare

The proposed development and stated cumulative schemes may have a significant effect on GP surgeries and healthcare capacity. Therefore, mitigation in the form of section 106 financial contributions should be sought, particularly if the available floorspace is not used for community and health facilities.

13.4.1.6 Open space and play space

The proposed scheme incorporates 6.25 ha of open space, which includes 0.25 ha (along with 6.99 ha of natural green space) of play space which exceeds the open space standards, therefore no additional mitigation is required.

13.4.1.7 Crime

The proposed development will be designed with SBD principles from the outset and therefore will have a beneficial effect on crime. These principles are assumed to be implemented for the cumulative schemes too and therefore there is no need for additional mitigation.

13.4.1.8 Health

The small impact on noise and air quality means there will be no additional need for mitigation of these effects.

13.4.1.9 Tourism

The negligible impact on tourism means there will be no additional need for mitigation.

13.5 RESIDUAL EFFECTS

Given the mitigation measures outlined, the residual effects for the socio-economic receptors are as follows. Residual effects are considered significant if they are moderate or major.

13.5.1.1 Housing

Based on the high sensitivity of the housing stock and the small to medium magnitude of impact at the borough level, it is considered that the proposed development would result in a minor to moderate beneficial permanent effect. The permanent effect will be long-term and will be direct and irreversible.

13.5.1.2 Education

Given the number of primary aged children likely to reside in the proposed development in comparison to the existing capacity identified, the surplus capacity as highlighted in the baseline assessment would result in a minor adverse impact on primary aged places at the ward level.

Given the number of secondary aged children likely to reside in the proposed development in comparison to the existing capacity identified, the surplus capacity as highlighted in the baseline assessment would result in a minor adverse impact on secondary aged places at the ward level.

After developer contributions to schools through section 106, these adverse effects will be mitigated and the effect will therefore be negligible.

13.5.1.3 Healthcare

Based on the increased population being brought forward, upon completion there will be a minor adverse effect on the demand for healthcare. Developer contributions to healthcare services through section 106 would mitigate against these adverse effects, and therefore the effect will be negligible.

13.5.1.4 Open space and play space

Based on the medium sensitivity of open space as highlighted in the baseline analysis and the small magnitude of impact, there will be a minor effect. Based on the medium sensitivity of the play space as highlighted in the baseline analysis and a small magnitude, there will be a minor beneficial effect.

The permanent effect will be long-term and will be direct and irreversible.

13.5.1.5 Construction employment

Considering the low sensitivity of the receptor and a medium magnitude of impact from construction jobs brought forward, there will be a minor to moderate beneficial effect on construction employment. The temporary effect will be seen in the short-term and will be direct and irreversible.

13.5.1.6 Operational employment

It is considered that the proposed development will result in a moderate beneficial effect for employment during the operational phase at a local authority level. The permanent effect will be long-term and will be direct and irreversible

13.5.1.7 Air Quality

During the construction phase, air quality will have a minor adverse effect on health receptors. This effect will be temporary and short term. During the operational phase, air quality will have a negligible effect on health receptors. This effect will be permanent and long term. Required embedded mitigation has been set out in the Air Quality assessment chapter.

13.5.1.8 Noise

During the construction phase, noise will have a minor adverse effect on health receptors. This effect will be temporary and short term. During the operational phase, noise will have a minor adverse effect on health receptors. This effect will be permanent and long term. Required embedded mitigation has been set out in the Noise assessment chapter.

13.5.1.9 Tourism

Considering the high sensitivity of the receptor and the small magnitude of impact, the proposed development will have a negligible effect on tourism in the local area. The permanent effect will be long-term and will be direct and irreversible.

13.5.1.10 Crime

Based on the medium sensitivity of the local crime rates and the small magnitude of impact, the safety and security design interventions are considered to result in a minor beneficial effect at a neighbourhood level.

13.6 OTHER ENVIRONMENTAL ISSUES

This section seeks to detail any considerations and environmental effects that have been identified with regard to the range of topics which have been introduced into the EIA requirements through the EIA Regulations 2017. Where there are no such considerations or environmental effects relevant to socioeconomics, this is also specified for clarity.

13.6.1 Other Environmental Issues of Relevance

13.6.1.1 Infrastructure

No issue in respect of infrastructure is considered relevant to this chapter.

13.6.1.2 Waste

No issue in respect of waste is considered relevant to this chapter.

13.6.1.3 Population and Human Health

For the socio-economic issues considered in this chapter, a range of human health benefits derive from economic participation. The health and wellbeing of users of the application site has been taken into consideration through the employment created on-site during both the construction and operational stages of the proposed development.

This Chapter has also described and assessed issues relevant to population and human health by assessing the likely noise and air quality impacts associated with the proposed development. As such, this ES chapter has inherently considered this issue.

13.6.1.4 Climate and Change

Climate change has the potential to affect the health of the users of the application site through changes in average temperatures. The proposed development will be designed to meet appropriate indoor ambient temperatures, including the consideration of aspects such as over-heating during summer months and an appropriate heating strategy for the winter months. As this is a design consideration, climate change has not been addressed any further within this socio-economic assessment.

13.6.2 Summary

With the exception of population and human health, and climate and change, no additional environment issues have been identified of relevance to this chapter.

13.7 SUMMARY OF EFFECTS

Table 13.22 provides a summary of the likely effects of the proposed development in relation to socio-economic issues and their potential significance taking account of the mitigation measures proposed. Whilst a number of minor adverse impacts have been identified a number of mitigation measures are proposed which will reduce the scope and extent of any impacts and those residual impacts are likely to be outweighed by the various beneficial impacts identified.

Table 13.22: Summary of Effects

Receptor	Description of the Residual Effect	Receptor Sensitivity	Additional Mitigation (if required)						
				Significance	ADV/ BEN	ST/M T/LT	D/ IND	P/T	R/ IRR
Construction			_	_					
Employment	Creation of a monthly average of FTE jobs over the construction program	Low	None Required	Minor to Moderate (not significant)	BEN	ST	D	Т	IRR
Operational									
Housing	Provision of residential units contributing to policy targets	High	None Required	Moderate (significant)	BEN	LT	D	Р	IRR
Education	Demand placed on primary education facilities	Low	Developer contribution to schools through Section 106	Negligible (not significant)	N/A	LT	D	Р	IRR
Education	Demand placed on primary education facilities	Low	Developer contribution to schools through Section 106	Negligible (not significant)	N/A	LT	D	Р	IRR
Healthcare	Demand placed on primary healthcare facilities	Low	Developer contribution to GP capacity through Section 106	Negligible (not significant)	N/A	LT	D	Р	IRR
Community Services	Demand for community amenity space	Medium	None Required	Negligible (not significant)	N/A	LT	D	Р	IRR
Open space and Play space	Demand for play space onsite	Medium	None Required	Minor (not significant)	BEN	LT	D	Р	IRR
Employment	Provision of floorspace likely to accommodate jobs	Low	None Required	Moderate (significant)	BEN	LT	D	Р	IRR
Health: Air	Impact on Air Quality	Medium	None Required	Negligible (not significant)	N/A	LT	D	Р	IRR

Receptor	Description of the Residual Effect	Receptor Sensitivity	Additional Mitigation (if required)	Residual Effect					
				Significance	ADV/	ST/M	,	P/T	R/
					BEN	T/LT	IND		IRR
Health:	Impact on Noise	Low	None Required	Minor	ADV	LT	D	Р	IRR
Noise				(not					
				significant)					
Tourism	Additional tourist	Medium	None Required	Negligible	N/A	LT	D	Р	IRR
	visitation			(not					
				significant)					
Crime	Level of Crime	Medium	None Required	Minor	BEN	LT	D	Р	IRR
				(not					
				significant)					

Key: ADV/BEN= Adverse/Beneficial; ST/MT/LT = Short-term/Medium-term/Long-term; D/IND = Direct/Indirect; P/T = Permanent/Temporary; R/IRR = Reversible/Irreversible

13.8 CONCLUSIONS

The socio-economic assessment undertaken for the proposed development has focused on housing, education, health services, community facilities, recreation and open space, employment, health, tourism and crime.

The assessment has used a range of nationally recognised research and survey information to establish a baseline profile of the local and regional economy and community, with the potential impacts of the proposed development assessed using standard industry ratios, data, assumptions and professional judgement.

The proposed development aims to deliver a scheme that appropriately responds to the local area context and needs. To this end the proposed development includes a number of beneficial construction and operational phase opportunities.

Construction Phase

Within the construction phase the proposed development would generate 35 net construction jobs which would specifically benefit residents over the 129-month construction duration, which in the context of the size and mobility of the construction workforce would have a temporary Minor Beneficial residual effect.

Operational Phase

Within the operational phase, the proposed development would have a significant moderate beneficial effect on employment through the provision of floorspace likely to accommodate jobs. The proposed development would have a minor beneficial impact on crime and the demand for play and open space.

Although noise would have a minor adverse effect through health impacts, this effect is not significant. The proposed development will have a negligible effect on community services, health through air quality and tourism. After taking recommended mitigation measures, the proposed development will have a negligible effect on the demand placed on education and healthcare facilities.