



Environmental Statement: Non-Technical Summary

Former Stag Brewery, Mortlake

February 2018

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This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS OHSAS 18001:2007)

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1. Introduction

This Non-Technical Summary of the Environmental Statement has been prepared by Waterman Infrastructure & Environment Ltd ('Waterman IE') on behalf of Reselton Properties Limited ('the Applicant') in relation to three linked planning applications for the comprehensive redevelopment of the former Stag Brewery Site in Mortlake ('the Site') within the London Borough of Richmond Upon Thames ('LBRuT').

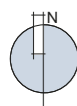
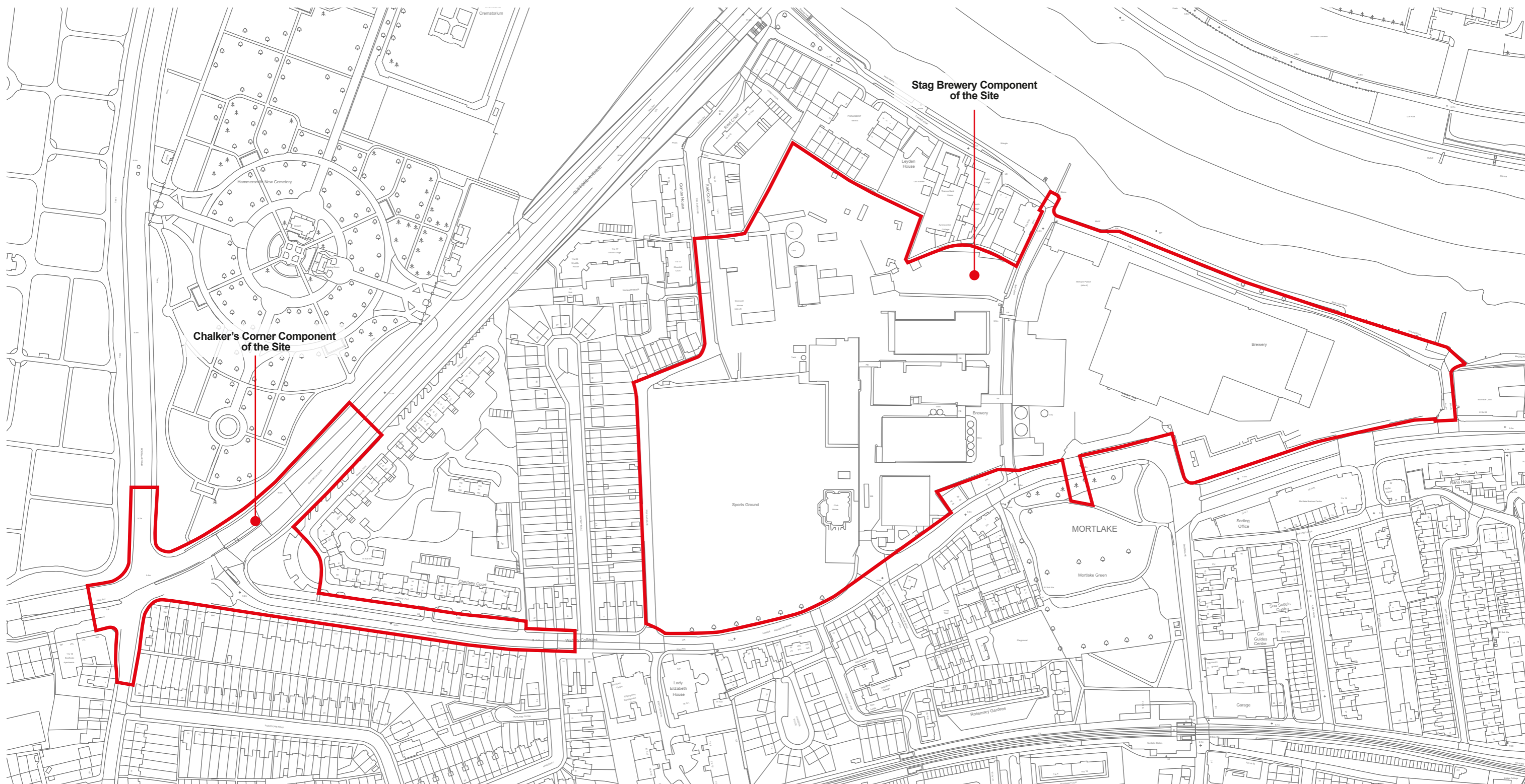
As shown in **Figure 1**, the former Stag Brewery Site is bounded by Lower Richmond Road to the south, the river Thames and the Thames Bank to the north, Williams Lane to the east and Bulls Alley (off Mortlake High Street) to the west. The Site is bisected by Ship Lane. The Site currently comprises a mixture of large scale industrial brewing structures, large areas of hardstanding and private playing fields.

The redevelopment (hereafter referred to as 'the Development') will provide homes (including affordable homes), accommodation for an older population, complementary commercial uses, community facilities, a new secondary school alongside new open and green spaces throughout. Associated highway improvements are also proposed, which include works at Chalkers Corner junction.

The three planning applications (which form the Development) are as follows:

- Application A – hybrid (i.e. part in detail and part in outline) planning application for comprehensive mixed use redevelopment of the former Stag Brewery site consisting of:
 - i. Land to the east of Ship Lane applied for in detail (referred to as Development Area 1); and
 - ii. Land to the west of Ship Lane (excluding the school) applied for in outline (referred to as Development Area 2).
- Application B – detailed planning application for the school (on land to the west of Ship Lane).
- Application C – detailed planning application for highways and landscape works at Chalkers Corner.

An Environmental Impact Assessment (EIA) has been undertaken by Waterman IE to assess the environmental effects of the Development. The EIA is reported in an Environmental Statement (ES) which has been prepared to accompany the planning application. The ES describes the likely significant environmental effects of the Development. This document provides a summary of the ES in non-technical language.



 The Site

Project Details	WIE10667-101: Stag Brewery, Mortlake
Figure Title	Figure 1: The Site
Figure Ref	WIE10667-101_GR_NTS_1A
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2. The Existing Site and Its Surrounding Context

The Site comprises two components of land as follows:

- the Stag Brewery – an approximately 9.25 hectare (ha) parcel of land predominantly occupied by the former Stag Brewery; and
- Chalkers Corner – an approximately 1.4 ha parcel of land encompassing highway and associated landscaping referred to as Chalkers Corner junction which includes the junction with the A316 (Clifford Avenue, A3003 (Lower Richmond Road) and A205 (South Circular).

The majority of the Site comprises the former Stag Brewery. This includes 16 industrial buildings (including the Maltings, Former Hotel and Former Bottling Building, which are locally designated as Buildings of Townscape Merit) surrounded largely by hard-standing. An area of approximately 2.06 ha within the Stag Brewery component of the Site is occupied by the private playing fields. A disused wharf is situated within the north east of the Stag Brewery component of the Site with limited access via Bulls Alley. Photographs of the existing conditions of the Site are shown in **Figure 2**.

The Site is bounded by a mix of uses and areas, with the River Thames bounding the north east of the Stag Brewery component of the Site (refer to Photograph 3 below) and Fulham (North Sheen) Cemetery bounding the north of the Chalkers Corner component of the Site. The land uses surrounding the Site are varied and include residential properties, retail, office, community, educational and open and amenity space.



Photograph 1 - View of sports pitch looking towards brewery buildings.



Photograph 2 - View of the Stag Brewery component of the Site with surrounding properties adjacent to the River Thames.



Photograph 3 - View of Chalkers Corner looking west.



Photograph 4 - View of towpath and existing River Wall forming the north east boundary of the Stag Brewery component of the Site.



Photograph 5 - The southern facade of the Maltings.



Photograph 6 - Former Hotel and Former Bottling Building.

Project Details	WIE10667-101: Stag Brewery, Mortlake
Figure Title	Figure 2: Photographs of the Existing Site
Figure Ref	WIE10667-101_GR_NTS_2A
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3. What are the Proposals?

The Development comprises three linked planning applications, as follows:

Application A

A hybrid planning application for the demolition of the majority of buildings and structures within the entire Stag Brewery component of the Site (with the exception of the Maltings and the façades of the former Hotel and Bottling building) and the redevelopment of the majority of the former Stag Brewery.

Planning permission is sought in detail for alterations and extensions to existing buildings and the erection of new buildings to comprise 443 residential dwellings, flexible use floorspace, office, cinema, hotel, gym and community use, within 12 buildings varying in height from 3 to 8 storeys, plus a single storey basement. Detailed permission is also sought for flood defence works, towpath works, landscaping, amenity space, play space, public open space, car and cycle parking, and installation of plant.

Planning permission is sought in outline (with all matters reserved) for the erection of new buildings to comprise residential dwellings, nursing and care home and flexible residential / assisted living apartments, within 9 buildings varying in height from 3 to 7 storeys, a single storey basement and various associated works.

Application B

A detailed application, also within the Stag Brewery component of the Site, for the construction of a six-form entry secondary school plus associated sports pitch and play space, floodlighting, landscaping, car and cycle parking, new access routes and associated works.

Application C

A detailed planning application within the Chalkers Corner component of the Site, for highways and landscaping works at Chalkers Corner. Planning permission is sought for reconfiguration of Chalkers Corner traffic junction and existing landscaped and informal parking area to facilitate amendments to lane configuration, a new cycle lane, works to existing pedestrian and cycle crossings and provision of landscaping and trees.

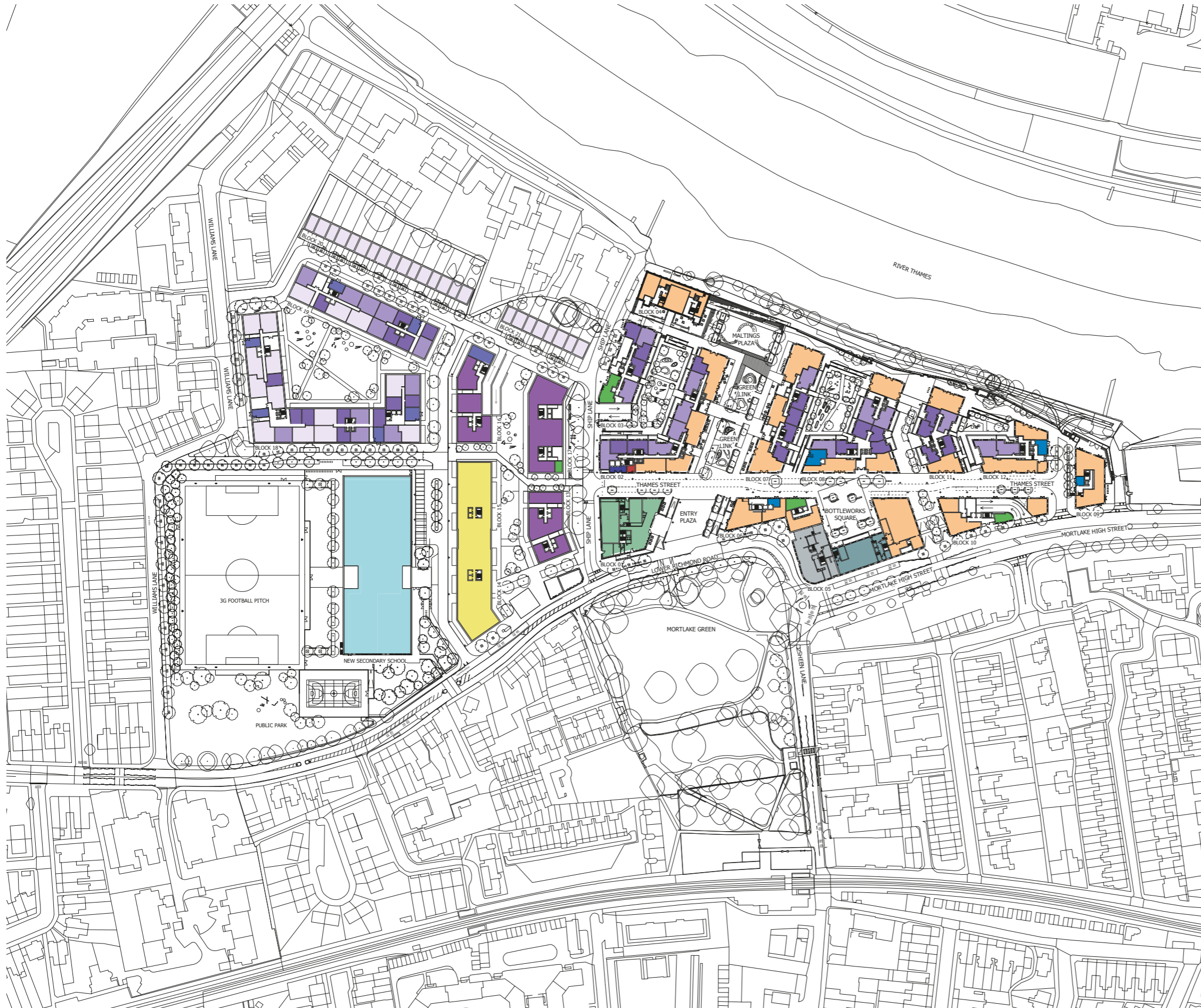
It is currently anticipated that the demolition, alteration, refurbishment and construction works (the Works) required to facilitate the Development would be carried out over a period of approximately 8 years. The Works are anticipated to commence in June 2019 and therefore for the purposes of the ES, the year of completion and full operation of the Development is considered to be 2027.

A Framework Construction Management Statement (FCMS) (including a draft Construction Logistics Plan (CLP)) has been provided / submitted to support the Planning Applications) which sets out how the Works would be carried out. The Applicant's intentions for managing environmental effects during the Works would be addressed through a site-specific Construction Environmental Management Plan (CEMP).

Visualisations of the Development are shown in **Figure 3** and the ground floor layout of the Masterplan is shown in **Figure 4**. A consolidated land use and accommodation schedule for the Development, which accounts for all three planning applications, is presented in **Table 1**.



Project Details	WIE10667-101: Stag Brewery, Mortlake
Figure Title	Figure 3: Illustrations of the Development
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- 2 BED
- 2 BED (L)
- 2 BED (M)
- 3 BED
- 3 BED (H)
- 4 BED
- 4 BED (H)
- ASSISTED LIVING
- CAR PARK ENTRANCE
- CARE HOME
- CINEMA
- CORE
- FLEXIBLE USE
- GAS METER ROOM
- HOTEL
- OFFICE
- PLANT
- REFUSE
- REFUSE STORE
- RESTAURANT/BAR
- SCHOOL
- SUBSTATION

Project Details	WIE10667-101: Stag Brewery, Mortlake
Figure Title	Figure 4: Ground Floor Layout of the Masterplan
Figure Ref	WIE10667-101_GR_NTS_4A
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Table 1: Proposed Land Use and Accommodation Schedule of the Development

Land use	
Residential	Up to 667 units
Office (including Site management office)	2,457 Gross Internal Area (GIA)
Cinema	2,120 GIA
Gym	740 GIA
Flexible uses – café / restaurant / bar / public house/ shops / financial and professional services / office / community / boathouse	4,664 GIA
Hotel / public house with accommodation	16 bedrooms
Flexible use assisted living / residential	Up to 150 units
Nursing and Care Home	Up to 80 ensuite rooms
School	Approx. 1,200 pupils
Car parking spaces	Up to 708 spaces
Cycle parking spaces	Up to 1,611 spaces

4. Alternatives and Design Evolution

In line with the UK regulations which relate to EIA, the ES provides a description of the main alternatives to the Development which were considered by the Applicant. In addition, a description of how the design of the Development evolved over time is presented. The main reasons for the choices made to achieve the final design (i.e. the Development) is provided in the ES, taking into account the likely significant environmental effects.

Guidance on the preparation of EIA suggests that it is good practice to consider 'alternative sites'. However, given that the Site has already been identified as a key Site for redevelopment by LBRuT's Stag Brewery Planning Brief, it is reasonable that alternative sites were not considered by the Applicant.

EIA Guidance also suggests that the option of doing nothing (the 'No Development' scenario) is also considered in an ES. The 'No Development' scenario would entail leaving the Site in its current vacant state. It is considered that under this scenario, the Site would remain underutilised and without redevelopment would lead to several missed opportunities for the Site, including no provision of homes and new public realm, and no new village heart for Mortlake. This would not accord with relevant National, Regional and Local planning policies, including those of The London Plan and LBRuT's Planning Brief.

On establishing the need and acceptability for a residential-led mixed use scheme, the Applicant and their design team worked up a Development in which the overall design, massing, external materiality and landscaping was informed by the Site's constraints and opportunities; particularly those relating to townscape and visual matters, microclimate, and pedestrian permeability. The final Development design emerged as a result of these factors together with an extensive programme of consultation with officers at LBRuT and other statutory and non-statutory consultees.

5. Approach and Environmental Impact Assessment Methodology

EIA is a process which aims to ensure that the likely significant environmental effects of a proposed development (which can be beneficial and / or adverse) are given due consideration in the determination of a planning application. In accordance with the relevant legislative requirements and best practice guidelines, the EIA was undertaken using established methods and assessment criteria. This involved visits to the Site, along with surveys, data reviews, consultation with several relevant statutory authorities, computer modelling and specialist assessment undertaken by a team of qualified and experienced consultants.

The first stage of the EIA process involved undertaking a 'Scoping Study'. The purpose of the study was to identify the potentially significant environmental effects associated with the Development and therefore provide the focus or scope of the EIA. The Scoping Report which presented the findings of the Scoping Study was submitted to the London Borough of Richmond upon Thames (LBRuT) to support a request for their 'Scoping Opinion'. LBRuT issued their draft 'Scoping Opinion' which was received on 25th May 2017. A letter of response from Waterman IE, dated 26th June 2017, provided clarification and confirmation of the matters to be addressed. LBRuT subsequently issued their formal Scoping Opinion on 30th June 2017.

It was agreed with LBRuT that the Stag Brewery EIA would need to include an assessment of the following environmental topics:

- Socio-Economics;
- Transport and Access;
- Noise and Vibration;
- Air Quality;
- Ground Conditions and Contamination;
- Surface Water Drainage and Flood Risk;
- Ecology;
- Archaeology;
- Built Heritage;
- Townscape and Visual;
- Wind Microclimate;
- Daylight, Sunlight, Overshadowing and Light Pollution; and
- Cumulative Effects.

Each of the above topics are addressed in the ES, with a chapter dedicated to each topic. In each chapter, a description of the assessment methodology is given together with, the relevant environmental conditions on and adjacent to the Site and the likely significant effects of the Development. The significance of likely effects is graded on a scale as either insignificant, minor, moderate or major (note, this NTS does not include this terminology of effects as its purpose is to present the findings of the ES in non-technical language). Each chapter also describes a range of measures that would be incorporated to avoid, reduce, or offset any identified likely adverse effects, and / or enhance likely beneficial effects. Such measures are referred to as 'mitigation measures'. The resulting effects (known as 'residual effects'), following the implementation of mitigation measures, are also described.

6. What are the Likely Environmental Effects and how would they be minimised?

6.1 Socio Economics

A socio-economic assessment has been undertaken using a wide range of information sources. These sources include a detailed review of planning policies, guidance and standards and population Census data. A quantitative approach was undertaken where possible, with certain assessments such as community safety and wellbeing undertaken qualitatively using professional judgement.

During the Works, the Development would provide economic benefits to the local area, creating an average of up to 1,110 jobs per year during the duration of the Works.

Once completed, the Development would generate up to 503 gross new jobs, depending on the exact nature of the commercial uses provided on the Site.

The provision of up to 667 residential dwellings, up to 150 flexible assisted living / residential units and up to 80 nursing home units as part of the Development would significantly contribute significantly to the housing target of LBRuT. A proportion of dwellings would be affordable and suitable for families.

It is estimated that the Development would have an additional resident population of between 1,750 and 1,850. The provision of a sixth-form entry secondary school with sixth form capacity for up to 1,200 pupils would meet the additional demand for secondary school places. The future demand for early years and primary school places would lead to a shortfall in capacity unless additional facilities come forward in the local area. Measures in the form of financial contributions may be required to help expand future capacity and ensure early years and primary school place provision is sufficient.

In terms of demand on local primary health services, the population yield of the Development would impose additional demands and costs upon the existing health provision. However, mitigation in the form of financial contribution is likely to off-set the potential pressures faced by existing providers in accommodating the additional demand arising from the Development.

The Development would provide 14,353m² of children's play space and a total of 39,430 of publicly accessible amenity space including play space on Site. As such, there will be sufficient children's play space and open space within the Development for the population size and child yield predicted. Provision of a cinema, gym and flexible community uses on-Site, in addition to provision of school facilities for multi-use via a Community Use Agreement, would result in beneficial effects on community facilities.

The Development would seek to design out crime features and would animate and activate the Site.

6.2 Transport and Access

An assessment of the transportation effects of the Development in terms of traffic, pedestrians, cyclists and public transport was undertaken. This has been based upon a range of information sources and includes a detailed assessment of future traffic using baseline traffic surveys and computer modelling.

The Works would generate the need for HGV traffic associated with general plant and material deliveries and the removal of waste from the Site. To effectively manage this, a Framework Construction Management Plan, including an outline Construction Logistics Plan, has been submitted with the planning applications. A detailed Construction Logistics Plan would be agreed with LBRuT and Transport for London and would include measures such as the use of agreed appropriate routes to and from Site for construction vehicles, provision for loading and unloading of vehicles off the public highway; and keeping local residents informed of activities.

The Development would provide 708 car parking spaces, of which 503 would be dedicated for the residents and 205 would be non-residential spaces. The operational Development would result in an increase in vehicle numbers using the local highway. As such, a number of highway improvements are proposed as part of the Development as outlined above under Application C. Signal timings at Chalkers Corner could be adjusted post Development to ease driver delay effects.

A Framework Delivery and Servicing Management Plan has been prepared and appended to the Transport Assessment which is appended to the ES, which aims to ensure that servicing and deliveries to the operational Development would be managed effectively. A Framework, School and Residential Travel Plans have been prepared which aims to encourage sustainable modes of transport, in particular walking and cycling.

There would be an increase in pedestrian and cycle movements at the Site compared to the existing situation. The Development provides for improved public realm with new pedestrian and cycle routes through the Site. A new high street would run east to west in the east part of the Stag Brewery component of the Site and a new green link through the Site would link Mortlake Green to the riverside. The existing towpath would be enhanced and a new riverside walk would run adjacent to the towpath, on the other side of the new flood defence wall within the Site.

It is also proposed to provide new cycle parking facilities across the Site for residents, visitors and people who work within the Development. Improvements to cycle lanes and facilities would also be made within the Chalkers Corner component of the Site.

In addition to the improvements to the Chalkers Corner component of the Site, further highways improvements would be undertaken surrounding the Stag Brewery component of the Site to improve conditions for pedestrians and cyclists. This would include:

- slowing speeds (i.e. traffic calming measures) and improving pedestrian and cycle crossing facilities along Lower Richmond Road and Mortlake High Street; and
- widening of Williams Lane and Ship Lane.

There would be an increase in the number of people at the Site using public transport compared to the existing situation. The requirement for increased bus capacity would be determined and secured via planning conditions once planning consent has been granted.

6.3 Noise and Vibration

The noise and vibration effects of the Development have been established in accordance with published guidelines and included a comprehensive baseline monitoring survey at the Site. The assessment used computer modelling based on the baseline monitoring survey, existing and future traffic flow data and the proposed layout of the Development. Where specific details of the Development are unknown (e.g. the end users of the commercial elements of the Development), a qualitative assessment was undertaken based on standard noise and vibration criteria.

The Works are likely to include activities that would be likely to increase noise levels and potentially cause vibration within and immediately adjacent to the Site. In particular, when activities are occurring closest to the Site boundary, this could result in temporary effects on occupants in surrounding properties.

However, the implementation of noise and vibration control and management measures through a Construction Environmental Management Plan for the Works would help to reduce noise disturbance to occupants of existing and future properties. Such measures would include using low-noise machinery and equipment, enclosing and screening machinery and using low-vibratory foundation methods. Demolition and construction traffic is not predicted to result in significant noise increases on local roads.

Any items of fixed building services plant installed as part of the Development would have the potential to generate noise. Suitable noise level limits have therefore been proposed to ensure that noise from plant does not cause disturbance to existing receptors in the surrounding area or future occupants of the Development. Noise levels resulting from traffic associated with the completed Development would be insignificant on all local roads.

Noise break-out from non-residential uses should not cause noise disturbance to existing receptors in the surrounding area or future occupants within the Development provided the building fabric provides appropriate attenuation. Servicing and deliveries associated with the Development could cause localised noise disturbance to the future occupants depending on number and time of day. Use of a servicing delivery plan to control the management and timing of deliveries would mitigate any adverse effects. The sports pitch and external play space at the proposed school may give rise to increased noise levels, however the noise would be intermittent and visually screened by trees, providing a psychologically positive benefit.

6.4 Air Quality

The air quality in the LBRuT exceeds national air pollution objectives and as a result LBRuT have designated the majority of the Borough as an Air Quality Management Area. An assessment was undertaken to determine the likely effects of the Development on local air quality using computer modelling of predicated traffic flow and energy plant data to identify the likely resultant changes to local air quality. This used baseline air quality monitoring data from LBRuT.

The main likely effects on local air quality during the Works would relate to dust. A range of measures to minimise or prevent dust would be implemented through the CEMP so that no significant dust effects would result.

The computer modelling undertaken determined the impact of exhaust emissions from construction traffic for the year of the peak construction activities (in 2022). The modelling has shown the effect of construction vehicles associated with the Development would be insignificant for all pollutants assessed. All construction plant would meet the Emissions Standard set out in the London Plan and therefore construction plant emissions on local air quality would be insignificant.

Computer modelling has also been carried out to predict the contribution of heating plant emissions and future traffic related emissions arising from the operation of the completed Development and the likely resultant changes that this would bring about to local air quality. The computer modelling identified that the highways works proposed would have a beneficial effect, and act as mitigation against the impact of the Stag Brewery element of the Development on air quality particularly at Chalkers Corner. Overall, the results of the computer modelling demonstrate that the Development would not to give rise to a significant air quality effect that would adversely affect the occupants of existing sensitive locations surrounding the Site or future residential and school users of the Development.

6.5 Ground Conditions and Contamination

A desk-based study of ground contamination at the Site indicates that there is a medium risk of ground contamination at the Site. Intrusive ground investigation undertaken for the land to the east of Ship Lane in the Stag Brewery component of the Site identified localised contamination hotspots.

A Remediation Strategy would be developed and agreed with the relevant statutory authorities, including LBRuT and the Environment Agency, and would be implemented during the early stages of the Works. Further and more detailed ground investigations are currently being undertaken on the western area of the Stag Brewery component of the Site, which would also inform the Remediation Strategy.

Implementation of the Construction Environmental Management Plan would minimise the potential risk to controlled waters and human health during the Works.

It is likely that the Site and surrounding area suffered bomb damage during the Second World War and unexploded devices could be encountered during excavation works. A detailed specialist survey of the Site has been recommended which would be undertaken prior to any intrusive works. Mandatory health and safety requirements would ensure all construction workers are provided with necessary awareness training to recognise potential unexploded ordnance and provided with safety instructions detailing actions to take should unexploded ordnance be encountered.

In addition to any specific remediation measures, the provision of buildings and hardstanding across the majority of the Site and the provision of clean topsoil in soft landscaping areas would result in a low risk of harm to human health and the wider environment following completion of the Development. Furthermore, the inclusion of green roofs, interceptors and silt traps would reduce silt and oil deposition into the River Thames than existing conditions leading to beneficial effects.

6.6 Surface Water Drainage and Flood Risk

The effects of the Development upon water resources and drainage have been informed by a review of various information sources including those made available by the Environment Agency and Thames Water; as well as the results of a Site investigations for ground conditions and contamination. A Flood Risk Assessment and Drainage Strategy has also been prepared to accompany the planning applications and is included as part of the ES. Based on this information, effects were qualitatively assessed using professional judgement.

During the Works, changes in the Site conditions have the potential to result in a temporary risk of surface water flooding. However, measures would be put in place to control surface water runoff from the Site in line with industry standards. Where appropriate, temporary drainage would be provided around the Site during the Works when there is no on-Site drainage network in place.

The Development would involve replacing and upgrading the river wall, which forms the north east boundary of the Stag Brewery component of the Site. Given the works to the river wall would be behind the existing river wall within the Stag Brewery component of the Site, the existing river wall would still be accessible from the towpath for maintenance access during the Works. Furthermore, given the new flood defence wall would be identical to the existing alignment, there would be no loss of flood plain storage.

Localised groundwater flooding could also occur during the excavation works required to construct the basements within the Development. Appropriate dewatering and disposal, using standard practices such as sumps and pumps, would be employed to prevent groundwater flooding of excavation areas.

Although the Site is located within Flood Zones 2 and 3 (medium and high probability of tidal flooding), the Site is protected by the River Thames flood defences, and as such, the risk of flooding from the River Thames is considered to be low. In the unlikely event of overtopping of defences or a breach, part of the Site is predicted to experience flooding. To address this, the Development has been designed to ensure the safety of occupiers and users of the proposed buildings, for example by land raising and installing flood barriers.

A surface water drainage strategy for the Development has been developed, which includes measures to reduce water runoff from the Site and control the rate of discharge of this water to the local sewer network. Surface water runoff would discharge to the River Thames via three outfalls and to the existing sewer network. Sustainable urban drainage (SuDS) methods would be used, allowing for the likely future increase in rainfall owing to climate change. The Development would not increase flood risk on the Site or elsewhere beyond the Site boundary, which is in line with national and local policy.

The Development would introduce new land uses on the Site resulting in an increase in foul water discharges from the Site. It is Thames Water's statutory duty to ensure that sufficient capacity exist in the foul water drainage system to cope with the demands of existing and future population demands.

There would be an increased demand for water supply resulting from the Development however, the implementation of water efficiency measures would be incorporated into the Development to minimise the demand as far as possible.

6.7 Ecology

The ecological assessment is based on an ecological desk study and protected species report, which presented the results of the bat, nesting birds and black redstart surveys. The Site is not located in a Statutory Designated Site, however the River Thames and Tidal Tributaries Site of Importance for Nature Conservation is located adjacent to the northern boundary of the Stag Brewery component of the Site. The ecological assessment focuses on the potential effects to this Site of Importance for Nature Conservation and on commuting and foraging bats along the River Thames.

The results of the bat surveys undertaken assessed that the habitats at the Site and adjacent to (i.e. the River Thames) the northern boundary of the Stag Brewery component of the Site are used on a sporadic basis by urban bat species typically associated to be non-light sensitive.

A Construction Environmental Management Plan would be adhered to, to ensure appropriate environmental controls to protect the River Thames and Tidal Tributaries Site of Importance for Nature Conservation from dust, noise, vibration, surface water run-off and lighting. The main hours of the Works would be undertaken during typical working hours minimising the requirement for additional lighting during the night and therefore no excessive light spill on these habitats for bats.

The inherent design of the Development would avoid light spill on the River Thames and the massing of the completed Development would also not result in any significant overshadowing effects on the River Thames and towpath. Whilst the floodlighting for the sports pitch is not yet fixed, it would be located away from any designated sites. The drainage system would be designed to incorporate filters or silt traps to avoid the discharge of any fuels or oil pollution entering the River. Furthermore, the provision of green space within the Development would provide amenity space for the future residents, alleviating pressure on the adjacent non-statutory sites.

The Development would provide ecological enhancements, including the provision of bat and bird nesting boxes, use of native tree species and biodiversity roofs. A Landscape and Environment Management Plan would be implemented to manage and ensure the permanence of the roosting, foraging and commuting habitats provided within the Development.

6.8 Archaeology (Below Ground)

An assessment of the effects of the Works on the archaeological (below ground heritage asset) resource within the Site was undertaken. This was assessed qualitatively based on professional judgement using a desk study and archaeological fieldwork undertaken at the Site.

The Site is located within the Mortlake and Barnes Archaeological Priority Area as designated by LBRuT. The Stag Brewery component of the Site is known to have been previously occupied by a Medieval bishops palace (the Archbishop of Canterbury) and parish church, to the east of Ship Lane, and by a Post Medieval mansion (owned by Thomas Cromwell, Earl of Essex) to the west of Ship Lane. These potential archaeological remains are considered of national importance. There is a low to moderate potential for prehistoric, Roman and Anglo-Saxon archaeological remains of local importance.

Archaeological evaluation and monitoring across the Stag Brewery component of the Site has revealed

evidence of extensive truncation by previous and existing development associated with the brewery. However, a large carved stone moulding considered to relate to either the mansion or the palace was recovered from a modern context (see below).

The likely effects of the Development would be associated with excavation, piling and foundation works required to facilitate the Development. Accordingly, archaeological mitigation has been proposed in the form of a phased archaeological evaluation programme, which would take place following demolition and site clearance. The archaeological mitigation would be secured by means of an appropriately worded standard planning condition.

There would be no likely effects on archaeological assets once the Development is complete and occupied.



Photograph: Carved stone recovered from archaeological fieldwork undertaken at the Site.

6.9 Built Heritage

The built heritage assessment was undertaken following a Site visit and review of archival material and Historic England's historic data. Heritage assets were identified on the Site and the effects of the Development on the relevant heritage assets on and surrounding the Site were qualitatively assessed based on the value of the heritage asset and the magnitude of impact.

There are no listed structures located within the Site, although there are seven listed buildings located immediately adjacent to the Site. Three structures (known as the Maltings Building, former Hotel and former Bottling building) within the Stag Brewery component of the Site are specifically identified by LBRuT as 'Buildings of Townscape Merit'. Other non-designated heritage assets within the Site include railway tracks, granite paving, river moorings, memorial plaques and historic gates.

Part of the Stag Brewery component of the Site running along Mortlake High Street and the Thames shoreline is located within the Mortlake Conservation Area. The Maltings building, former Bottling building, former Hotel and parts of the surviving boundary wall of the Site are identified by LBRuT as contributing to the significance of the Conservation Area. To the south of the Stag Brewery component of the Site is the Mortlake Green Conservation Area.

The demolition and removal of the modern brewery buildings existing on the Site would result in beneficial effects to the setting of the identified heritage assets. Implementation of the Construction Environmental Management Plan would ensure that measures are taken to limit the extent of vibration and dust, including easements from the Buildings of Townscape Merit, reducing the effect upon heritage assets.

The Maltings and the facades of the former Hotel and former bottling buildings would be retained. There would be some minor adverse effects as a result of the loss of historic fabric, however these adverse effects should be considered in the wider context of the Development overall and the harm weighed against the benefits of the Development.

Retention and improvement to the setting of the railway tracks, paving and moorings within the Site would result in beneficial effects. Once the Development is complete, the change of setting of the heritage assets within and surrounding the Stag Brewery component of the Site would be beneficial.

6.10 Townscape and Visual

The Site does not feature within any of the London Strategic Viewing Corridors. However, the Site forms part of the backdrop of local views designated by LBRuT. Seven townscape character areas have been identified by LBRuT within or surrounding the Site. The local views to be assessed were agreed with LBRuT and visualisations of the Development from these local viewpoints were prepared. The townscape and visual effects were qualitatively determined based on professional judgement and review of the visualisations of the Development.

During the Works, there would inevitably be a visual intrusion to the local townscape and views from locations close to the Site as a result primarily of large construction plant and machinery, including tower cranes, and the presence of partially completed built form of the Development. However, this is unavoidable for the redevelopment of the Site and would only be temporary in nature.

Consideration of the visual effect of the Development, once completed, has been an integral part of the Applicant's design approach. The design of the Development has been developed throughout the design process to take account of likely townscape and visual impact. The intention of the Applicant is for the Development to promote buildings of the highest architectural and urban design quality, which would contribute positively to the local townscape. As such, likely significant adverse effects have been avoided.

The Development would result in a significant improvement to the Site and the surrounding townscape in terms of architectural quality and urban design, particularly in relation to Townscape Character Area 1: Mortlake and Townscape Character Area 7: Stag Brewery, both of which are located within the Stag Brewery component of the Site. Whilst the sports ground (locally designated as Other Open Land of Townscape Importance) would be reduced in area to facilitate the new school building and residential blocks, a substantial portion of the open space would be available for public access.

The majority of local views would also experience beneficial effects once the Development is completed. Recreational users of the Thames Path National Trail and road users on Thames Bank would experience some adverse effects as there would be the addition of further buildings where there were previously gaps at the riverside. However, views along and across the river would continue to remain distinctive and form a key element of local visual amenity.

6.11 Wind Microclimate

An assessment of the likely wind conditions as a result of the Development and the suitability of these in terms of pedestrian comfort has been undertaken. The assessment has been informed by appropriate meteorological data and detailed wind tunnel testing.

The wind effects during the Works has been assessed using professional judgement, informed by an analysis of the background windiness of the Site based on the meteorological data. The demolition of the existing buildings would not be expected to have a significant effect on the wind conditions within, and immediately surrounding, the Site. As construction of the Development proceeds, the wind conditions of

the Site would gradually adjust to the conditions of the completed Development.

The assessment of completed Development effects has demonstrated that even in the absence of mitigation, the majority of the Development would be suitable for its intended pedestrian activities. There would also be no significant wind effects on off-Site receptors, including Mortlake Green, the tow path and the River Thames.

It has been identified that if a building entrance were to be located at the west facing façade of Building 16 then this location would be subject to wind conditions that would not be suitable for use. However, as this part of the Development is proposed in outline only, it is considered that this issue be deferred to subsequent reserved matters applications in respect of Building 16. This issue could be addressed in the future by either not proposing a building entrance at this location, recessing the building entrance or through tall tree planting or screens.



Photograph: Wind tunnel test of the Development with existing surrounds.

6.12 Daylight, Sunlight, Overshadowing and Light Pollution

An assessment has been made of the likely effect of the Development on the daylight, sunlight, overshadowing and light pollution on neighbouring properties and amenity spaces near to the Site. The technical analysis has been undertaken quantitatively via the creation of a digital three-dimensional model of the Site and surroundings, based on laser scan measured survey data.

As existing buildings are demolished, some temporary improvements to daylight, sunlight and overshadowing are predicted at the closest residential receptors to the Site. During the construction phase, a number of tall cranes would be present on-Site. However, their size and temporary presence would lead to generally imperceptible effects to local reductions in daylight and sunlight. Construction of the Development would have a gradually increasing effect on the levels of daylight, sunlight, overshadowing and light pollution to residential properties and amenity spaces surrounding the Site as the construction progresses. The effects that are perceptible as the superstructure progresses would be

similar, albeit less, to those of the completed Development.

As would be expected with a Development of this scale, there are isolated significant effects to the neighbouring residential properties in terms of daylight. In this case, the Development replaces relatively low rise buildings and as such the proportional reduction of daylight, on which significance is based, is large to the residential receptors nearest to the Site. Properties adversely affected include Butler House, e, Churchill Court, Aynescombe Cottage, Rann House, 2 to 6 Williams Lan and Jolly Gardeners. Overall, the number of properties that experience significant effects with the Development in place is low and the majority of effects are to windows that are placed beneath overhanging balconies, which inhibit levels of daylight.

There would be no significant effects in terms of levels of sunlight to existing surrounding properties or overshadowing to existing surrounding amenity areas. The Development has been designed to allow suitable light penetration to proposed amenity areas where possible, with only a small number of areas showing deviations from the suggested targets.

As is usual at the planning stage, a final and fixed lighting scheme has not been developed for the Development. The provisional lighting scheme has been designed in order to ensure that standard guidelines are met. Full consideration has been given within the lighting strategy to ensure lighting does not adversely affect ecological receptors (e.g. bats) along the River Thames, nor properties along Williams Lane as a result of the floodlighting for the proposed sports pitch.

6.13 Cumulative Effects

There are no planning applications currently before the Council or extant permissions in place within 1 km of the Site that would give rise to significant environmental effects owing to their small scale and location within established residential areas.

As such, only in-combination cumulative effects (the combination of a number of individual effects resultant from the Development upon one receptor) likely to arise during the Works has been considered. This is because the greatest likelihood of effect interaction, and hence potential adverse cumulative effects, would arise during the Works.

During the Works, a combination of nuisance effects from noise and vibration together with townscape, visual and built heritage effects could be experienced by receptors. The implementation of environmental control measures through a Construction Environmental Management Plan would minimise the nuisance effects on local residents, historic assets and conservation areas and pedestrians and other road users during the Works.

7. What will happen next?

Following the submission of the detailed planning application, there would be an opportunity for any interested parties to comment on the proposals. The ES and a set of documents supporting the planning applications can be viewed on Richmond Council's website:

Richmond Council's website: <http://www.richmond.gov.uk/>

Additional copies of the ES can be purchased from Waterman on request (contact details below). A CD version of the ES can be purchased at a cost of £20.

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