



BREEAM New Construction 2018 Pre-Assessment Report

New Lane, Havant

20th May 2019



Quality Management

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Prepared by	G Davies			
Signed				
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EXECUTIVE SUMMARY

This report has been prepared to assess the maximum potential BREEAM score and rating for the proposed development at New Lane, Havant.

A BREEAM pre-assessment was carried out for the development to establish the feasibility of achieving the following BREEAM performance objectives:

- An overall BREEAM score of $\geq 55.00\%$.
- An overall BREEAM Rating of Very Good.

The pre-assessment is based upon the BREEAM New Construction 2018 non-domestic methodology (SD5078:2.0-2018) with the appropriate measures applied under the BREEAM 'Industrial: Shell & Core' methodology. This represents the most appropriate and most recent BREEAM methodology for the development.

On completion of the BREEAM review exercise, the proposed development at New Lane, Havant could provisionally achieve a maximum BREEAM '**Very Good**' rating of **57.70%**. This ensures an adequate sustainability rating and maximum improvement in energy efficiency can be achieved, which accurately reflects the proposed development type and function.

Signed:

A black rectangular redaction box covering the signature of Gareth Davies.

Gareth Davies

Date:

20th May 2019

RedSix BREEAM Assessor & Accredited Professional

INTRODUCTION

This report has been prepared to outline the BREEAM strategy for the proposed development at New Lane, Havant. Based upon our understanding, the proposed development comprises the construction of 5,516m² (Gross Internal Area) units with associated access, car parking, hard and soft landscaping.

BREEAM (Building Research Establishment Environmental Assessment Method) is administered by the Building Research Establishment (BRE) which is an internationally recognised procedure for reviewing and improving the environmental design and performance of non-residential buildings. Points are awarded in nine categories according to achieving specific criteria, resulting in single overall BREEAM score/rating, as follows:

- Unclassified (less than 30%)
- Pass (30 – 44%)
- Good (45 – 54%)
- Very Good (55 – 69%)
- Excellent (70– 84%)
- Outstanding (> 85%)

The BREEAM performance objectives for this project are confirmed to be:

- A minimum overall BREEAM score of 55.00%.
- An overall BREEAM Rating of Very Good.

This pre-assessment is based upon the BREEAM New Construction 2018 non-domestic methodology (SD5078:2.0-2018), with the appropriate measures applied under the BREEAM 'Industrial: Shell & Core' methodology. This represents the most appropriate and most recent methodology for the development.

The table below summarises the number of credits targeted for the development in each of the BREEAM categories, using the BREEAM Pre-Assessment scoring sheet:

Section	Environmental Weighting	Credits Available	Credits Achieved	Weighted Score
Management	11.00%	18.00	13.00	7.94%
Health & Wellbeing	8.00%	10.00	3.00	2.40%
Energy	14.00%	19.00	7.00	5.15%
Transport	11.50%	12.00	3.00	2.87%
Water	7.00%	8.00	5.00	4.37%
Materials	17.50%	14.00	11.00	13.75%
Waste	7.00%	9.00	7.00	5.44%
Land Use & Ecology	15.00%	13.00	5.00	5.76%
Pollution	9.00%	11.00	11.00	9.00%
Total				56.70%
Exemplary Credits				1.00%
TOTAL BREEAM SCORE				57.70%

BREEAM PRE-ASSESSMENT

The following sections include each 2018 BREEAM measure applicable to the project, a detailed narrative confirming if each measure can or cannot be achieved, along with the number of credits targeted for each achievable measure.

Management

Man01: Project Delivery Planning	Prior to completion of the Concept Design (RIBA Stage 2 or equivalent), the project delivery stakeholders will meet to identify and define their roles, responsibilities and contributions for each of the key phases of project delivery, including consideration of the following: • End user requirements • Aims of the design and design strategy • Particular installation and construction requirements/limitations • Occupiers' budget and technical expertise in maintaining any proposed systems • Maintainability and adaptability of the proposals • Requirements for the production of project and end user documentation • Requirements for commissioning, training and aftercare support. The project team will also demonstrate how the project delivery stakeholder contributions and the outcomes of the process have influenced or changed the Initial Project Brief.	1 / 1
Man01: BREEAM Advisory Professional (Concept Design)	A BREEAM AP will be involved in the project at an appropriate time and level to work with the project team, including the client, to consider the links between BREEAM issues and assist them in maximising the project's overall performance against BREEAM, from their appointment and throughout Concept Design. The BREEAM AP will also undertake the following responsibilities: • Monitor progress against the performance targets agreed throughout all stages after their appointment where decisions critically impact BREEAM performance. • Proactively identify risks and opportunities related to the achievement of the targets agreed. • Provide feedback to the project team as appropriate, to support them in taking corrective actions and achieving their agreed performance targets. • Monitor and, where relevant, coordinate the generation of appropriate evidence by the project team.	1 / 1
Man01: BREEAM Advisory Professional (Developed Design)	The BREEAM AP will be involved in the project at an appropriate time and level to: • Work with the project team, including the client, to consider the links between BREEAM issues and to assist them in maximising the project's overall performance against BREEAM throughout Developed Design. • Monitor progress against the performance targets agreed throughout all stages where decisions critically impact the specification and tendering process and the BREEAM performance. • Proactively identify risks and opportunities related to the achievement of the targets agreed. • Provide feedback to the project team as appropriate, to support them in taking corrective actions and achieving their agreed performance targets. • Monitor and, where relevant, coordinate the generation of appropriate evidence by the project team.	1 / 1
Man02: Life Cycle Cost Analysis	The proposed building is largely based upon a simple, well-established and refined fabric specification. Undertaking a BREEAM compliant LCC analysis would not be worthwhile as this established specification is unlikely to change, therefore this credit cannot be achieved.	0 / 2
Man02: Capital Cost Reporting	The predicted capital cost for the development, in pounds per square metre (£/m²), will be reported to the BREEAM assessor.	1 / 1
Man03: Timber Procurement	All site timber used during the construction process will be responsibly and legally sourced in accordance with UK Government's Timber Procurement Policy and have FSC or PEFC certification.	P

Man03: Main Contractor EMS	It is assumed the Principal Contractor for the project will operate a third party certified environmental management system such as ISO14001.	1 / 1
Man03: BREEAM AP (Site)	A BREEAM AP will be involved in the project at an appropriate time and level to: • Work with the project team, including the client, to consider the links between BREEAM issues and assist them in achieving and if possible going beyond the design intent, to maximise the project's performance against the agreed performance targets throughout the Construction, Handover and Close Out stages. • Monitor construction progress against the performance targets agreed throughout all stages where decisions critically impact BREEAM performance. • Proactively identify risks and opportunities related to the procurement and construction process and the achievement of the targets agreed. • Provide feedback to the constructors and the project team as appropriate, to support them in taking corrective actions and achieving their agreed performance targets. • Monitor and, where relevant, coordinate the generation of appropriate evidence by the project team and the provision to the assessor.	1 / 1
Man03: Responsible Construction Management	The main contractor will ensure the minimum number of actions are undertaken from the BREEAM Table 4.1 (Appendix B) in order to achieve one credit, PLUS an additional six items from the table.	2 / 2
Man03: Monitoring of Energy & Water Consumption	The Main Contractor will monitor and record data on energy consumption (kWh) from the use of construction plant, equipment (mobile and fixed) and site accommodation necessary for completion of all construction processes. The Main Contractor will also monitor and record data on water consumption (m3) from the use of construction plant, equipment (mobile and fixed) and site accommodation necessary for completion of all construction processes.	1 / 1
Man03: Monitoring Transport or Construction Materials & Waste	The Main Contractor will monitor and record data on transport resulting from delivery of the majority of construction materials to site and construction waste from site. And using the collated data, report separately for materials and waste, the total fuel consumption (litres) and total carbon dioxide emissions (kgCO ₂ eq), plus total distance travelled (km).	1 / 1
Man04: Commissioning Schedule & Responsibilities	A schedule of commissioning and testing will be produced that identifies and includes a suitable timescale for commissioning and re-commissioning of all complex and non-complex building services and control systems and testing and inspecting building fabric. The schedule will identify the appropriate standards that all commissioning activities will be conducted in accordance with, such as current Building Regulations, BSRIA and CIBSE guidelines and/or other appropriate standards, where applicable. An appropriate project team member will be appointed to monitor and programme pre-commissioning, commissioning, testing and, where necessary, re-commissioning activities on behalf of the client. The principal contractor will account for the commissioning and testing programme, responsibilities and criteria within their budget and main programme of works, allowing for the required time to complete all commissioning and testing activities prior to handover.	1 / 1
Man04: Commissioning Building Services	For complex building services and systems, a specialist commissioning manager is to be appointed during the design stage (by either the client or the principal contractor) with responsibility for: • Undertaking design reviews and giving advice on suitability for ease of commissioning. • Providing commissioning management input to construction programming and during installation stages. • Management of commissioning, performance testing and handover/post-handover stages. Where there are simple building services, this role can be carried out by an appropriate project team member, provided they are not involved in the general installation works for the building services systems.	1 / 1

Man04: Handover	Prior to handover, two building user guides will be developed for the following users: • A non-technical user guide for distribution to the building occupiers. • A technical user guide for the premises facilities managers. A draft copy will be developed and discussed with users first to ensure the guide is most appropriate and useful to potential users. Two training schedules will be prepared and timed appropriately around handover and proposed occupation plans for the following users: • A non-technical training schedule for the building occupiers. • A technical training schedule for the premises facilities managers	1 / 1
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Health & Wellbeing

Hea01: Daylighting	The required daylight factor levels of 2%, for each applicable space will not be achieved, due to the depths of the occupied operational areas, therefore this credit cannot be achieved.	0 / 1
Hea01: View Out	A BREEAM compliant adequate view out will not be available to all areas due to the depth of the operational areas, therefore this credit cannot be achieved.	0 / 1
Hea01: Internal, External Lighting Levels, Zones & Controls	Illuminance (lux) levels in all internal relevant building areas of the building will be specified in accordance with the SLL Code for Lighting 2012. For areas where computer screens are regularly used, the lighting design will comply with CIBSE Lighting Guide 7 sections 3.3, 4.6, 4.7, 4.8 and 4.9. Illuminance levels for lighting in all external areas within the construction zone will be specified in accordance with BS5489-1:2013 Lighting of roads and public amenity areas; and BS EN 12464-2:2014 Light and lighting - Lighting of work places - Part 2: Outdoor work places. Internal lighting will also be zoned as follows: • In office areas, zones of no more than four workplaces. • Workstations adjacent to windows/atria and other building areas separately zoned and controlled.	1 / 1
Hea02: Ventilation	It is a functional requirement of this type of development that access roads, service yards, car parking and delivery areas are within close proximity to the building fabric. In order to achieve this measure, all vehicular areas would need to be >10m from all external windows and doors, therefore this credit cannot technically be achieved.	0 / 1
Hea02: VOC Emissions from Building Products	Although a large majority of finishes and fittings will confirm to the VOC requirements of the BREEAM measure, several hardwearing finishes do not meet the required standards, and an alternative specification which meets operational and maintenance requirements is not currently available, therefore this credit cannot be achieved.	0 / 1
Hea04: Thermal Modelling	In order to achieve this measure a dynamic thermal model will need to be carried out to demonstrate the building can deliver thermal comfort levels in occupied spaces in accordance with the criteria set out in CIBSE Guide A Environmental Design. The parameters of undertaking this model require the occupancy and activity uses of each working area to be known along with the hours of operation. As a result, undertaking this study would be of no benefit to the design or project as these parameters are currently unknown.	0 / 2
Hea06: Security	It is expected the requirements of Secured by Design will be achieved for the project, however a BREEAM compliant a Suitably Qualified Security Specialist (SQSS) has not been employed to conduct an evidence-based Security Needs Assessment (SNA) during or prior to Concept Design (RIBA Stage 2 or equivalent).	0 / 1
Hea07: Safe Access	Due to the spatial constraints associated with the site, the full requirements of the measure, such as dedicated cycle paths, dedicated delivery areas, and delivery routes not crossing or sharing pedestrian or cyclist routes, cannot be technically achieved.	0 / 1
Hea07: Outside Space	An outside space providing building users with an external area will be provided.	1 / 1

Energy

Ene01: Energy Performance	Up to nine credits are available depending on the calculated Energy Performance Ratio for the proposed building. Based upon the proposed design, is currently expected that four credits can be typically achieved for this type of building. This represents an energy efficient design which exceeded baseline Building Regulations compliance thresholds.	4 / 9
Ene02: Energy Monitoring	Energy metering systems will be installed for each unit that enable at least 90% of the estimated annual energy consumption of each fuel to be assigned to the various end-use categories of energy consuming systems. In addition, an energy monitoring and management system or separate accessible energy sub-meters with pulsed or other open protocol communication will be provided for each unit.	1 / 1
Ene02: Sub-Metering of High Energy Areas	An energy monitoring and management system or separate accessible energy sub-meters with pulsed or other open protocol communication outputs for future connection to an energy monitoring and management system will be provided for relevant function areas within each unit.	1 / 1
Ene03: External Lighting	The average initial luminous efficacy of the external light fittings within the construction zone will be not less than 70 luminaire lumens per circuit Watt. External light fittings will be automatically controlled through a time switch, or daylight sensor, to prevent operation during daylight hours. Presence detection will also be provided in areas of intermittent pedestrian traffic.	1 / 1
Ene04: Passive Design Measures	A passive design analysis has not been undertaken for the project. This is due to the spatial constraints of the site, and the economic requirement to provide a suitable number of units.	0 / 1
Ene04: LZC Feasibility Report	A feasibility study will not be carried out to establish the most appropriate local (on-site or near-site) low or zero carbon (LZC) energy source for the building. In order to determine the most appropriate system, the activity use of each unit should be known in order to make a valid judgement. Without this information, there is a high risk of installing a system which could be unsuitable for any potential occupier.	0 / 1

Transport

Tra01: Transport Assessment & Travel Plan	During the feasibility and design stages, a travel plan will be developed based on a site-specific travel assessment or statement. The site-specific travel assessment or statement will cover as a minimum (where applicable): - Existing travel patterns and opinions of existing building or site users towards cycling and walking, identifying constraints and opportunities, if relevant. - Travel patterns and transport impact of future building users - Current local environment for walkers and cyclists (accounting for visitors who may be accompanied by young children) - Reporting of the number and type of existing accessible amenities, within 500m of the site - Disabled access (accounting for varying levels of disability and visual impairment) - Calculation of the existing public transport Accessibility Index (AI). - Current facilities for cyclists The travel plan will include proposals to increase or improve sustainable modes of transport and movement of people and goods during the building's operation and use. A copy of the completed travel plan will also be provided to future building occupants.	2 / 2
Tra02: Sustainable Transport Measures	Credits are awarded according to the projects Accessibility Index, and the total number of points achieved for the implementation of specific measures. Based upon the project proposals it is expected the following measures will be undertaken: Access to an outdoor open space (public or private, provided suitably sized and accessible to building users).	1 / 10

Water

Wat01: Water Consumption	It is currently expected that a 40% improvement beyond baseline consumption figures will be achieved through the specification of the following fittings: • WCs with an effective flush volume of 4 litres. • Toilet wash hand basin taps with a flow rate of 3.5l/min • Urinal cistern (2 or more) volume of 0.75 l/bowl/hr. • Urinal cistern (1 only) volume of 1 l/bowl/hr.	3 / 5
Wat02: Water Meter	A water meter will be specified and installed on the mains water supply to each unit, and each meter (main and sub) will have a pulsed output to enable connection to a Building Management System (BMS) for the monitoring of water consumption.	1 / 1
Wat03: Leak Detection System	It is assumed that a BREEAM-compliant leak detection system will not be installed to each unit, therefore this credit is not currently targeted.	0 / 1
Wat03: Flow Control Devices	One of the following types of flow control devices will be specified and installed to each WC area: • A time controller i.e. an automatic time switch device to switch off the water supply after a predetermined interval. • A programmed time controller i.e. an automatic time switch device to switch water on and/ or off at predetermined times. • A volume controller i.e. an automatic control device to turn off the water supply once the maximum preset volume is reached. • A presence detector and controller i.e. an automatic device detecting occupancy or movement in an area to switch water on and turn it off when the presence is removed.	1 / 1

Materials

Mat01: Building Life Cycle Assessment (LCA)	Up to seven credits are available where a building LCA of the superstructure is undertaken at concept and technical design stages using the BREEAM IMPACT compliant LCA tool and the results are submitted to BRE for comparison with the BREEAM benchmark. It is currently expected that five credits can be achieved.	5 / 7
Mat02: Environmental Product Declaration	Every effort will be made to ensure construction products with an Environmental Product Declaration (EPD) are specified for the project, however not all materials have not yet been determined and so the achievement of this requirement cannot be guaranteed at this stage.	0 / 1
Mat03: Sustainable Timber	All timber and timber-based products used on the project are legally harvested and traded timber as per the UK Government's Timber Procurement Policy (TPP)	P
Mat03: Sustainable Procurement	A sustainable procurement plan will be used by the design team to guide specification towards sustainable construction products. The plan will be: • Be in place before Concept Design. • Include sustainability aims, objectives and strategic targets to guide procurement activities. Note: targets do not need to be achieved for the credit to be awarded but justification must be provided for targets that are not achieved. • Include a requirement for assessing the potential to procure construction products locally. There must be a policy to procure construction products locally where possible. • Include details of procedures in place to check and verify the effective implementation of the sustainable procurement plan.	1 / 1
Mat03: Responsible Sourcing of Materials	Every effort will be made to ensure all materials will be responsibly sourced, with a view to achieving three credits. Copies of ISO14001, BES6001 or FSC/PEFC certificates for all major building materials will need to be provided.	3 / 3
Mat05: Designing for Durability & Resilience	The design will incorporate suitable durability and protection measures or features/solutions to prevent damage to the vulnerable parts of the building. This will include, but not necessarily limited to: Protection from the effects of high pedestrian traffic in main entrances, public areas and thoroughfares (corridors, lifts, stairs, doors etc).	1 / 1

	Protection against any internal vehicular/trolley movement within 1m of the internal building fabric in storage, delivery, corridor and kitchen areas. Protection against, or prevention from, any potential vehicular collision where vehicular parking and manoeuvring occurs within 1m of the external building façade for all car parking areas and within 2m for all delivery areas. Potential malicious damage to building materials and finishes, in public and common areas where appropriate. In addition, key exposed building elements will be designed and specified to limit long and short-term degradation due to environmental factors. A detailed assessment of the element's resilience when exposed to the applicable material degradation and environmental factor will be undertaken. A convenient access to the roof and façade for cost-effective cleaning, replacement and repair will also be provided; and the roof and façade will be designed to prevent water damage, ingress and detrimental ponding.	
Mat06: Material Efficiency	Every effort will be made to ensure construction materials are used as efficiently as possible, and a full BREEAM compliant RIBA Stage 1 material efficiency review will be undertaken, including further reviews at each RIBA stage through to completion & handover.	1 / 1

Waste

Wst01: Construction Waste Management	A Resource Management Plan (RMP) will be developed covering the non-hazardous waste related to on-site construction and dedicated off-site manufacture or fabrication (including demolition and excavation waste) generated by the building's design and construction. In addition, construction waste related to on-site construction (excluding demolition and excavation waste) will meet or exceed the necessary waste benchmark to achieve two credits: • 1 Credit - 13m³ per 100m² (gross internal floor area) • 2 Credits - 7.5m³ per 100m² (gross internal floor area) • 3 Credits - 3.4m³ per 100m² (gross internal floor area)	2 / 3
Wst01: Diversion of Waste from Landfill	At least 70% by volume (or 80% by tonnage) of non-demolition waste and 80% by volume (or 90% by tonnage) of demolition waste will be diverted from landfill to be reused or recycled.	1 / 1
Wst02: Recycled and Sustainably Sourced Aggregates	This credit is currently not achievable but may be re-addressed once the availability and quality of locally sourced recycled aggregate can be established.	0 / 1
Wst03: Operational Waste	A dedicated external space to cater for the segregation and storage of operational recyclable waste volumes generated by the assessed building its occupant(s) and activities will be provided. The dedicated space(s) will be: • Clearly labelled, to assist with segregation, storage and collection of the recyclable waste streams • Accessible to building occupants / facilities operators for the deposit of materials and collections by waste management contractors • Of a capacity appropriate to the building type, size, number of units (if relevant) and predicted volumes of waste that will arise from daily or weekly operational activities and occupancy rates (2m²/1000m² or min 10m²).	1 / 1
Wst05: Climate Change Adaptation Strategy	A climate change adaptation strategy for structural and fabric resilience will be undertaken, to evaluate the impact on the building over its projected life cycle from expected extreme weather conditions.	1 / 1
Wst06: Design for Disassembly & Functional Adaptability	A building-specific study to explore the ease of disassembly and the functional adaptation potential of different design scenarios will be undertaken for the project.	1 / 1
Wst06: Disassembly & Functional Adaptability – Implementation	The results of the above study will be incorporated into the building design and construction in relation to potential future disassembly and adaptability.	1 / 1

Land Use & Ecology

Le01: Site Selection (Previously Occupied Land)	Greater than 75% of the proposed project will not be situated on previously developed land, therefore this credit cannot be achieved.	0 / 1
Le01: Site Selection (Contaminated Land)	It is expected the site is not deemed to be significantly contaminated, therefore this credit cannot be achieved.	0 / 1
Le02: Identifying & Understanding Risks & Opportunities (Route 2)	A suitably qualified Ecologist has been employed to survey and evaluate the ecological baseline of the site, taking account of the zone of influence, to establish: • Current and potential ecological value and condition of the site, and related areas within the zone of influence. • Direct and indirect risks to current ecological value • Capacity and feasibility for enhancement of the ecological value of the site and, where relevant, areas within the zone of influence. Data will be collated and shared with project team to inform the site preparation, design or construction works.	1 / 1
Le02: Ecological Outcomes for the Site (Route 2)	In addition to the above, during Concept Design, the project team will liaise and collaborate with representative stakeholders to identify and consider ecological outcomes for the site, appropriate to the scale and type of development. When determining the ecological outcome for the site, this will involve the identification, appraisal and selection of specific solutions and measures sufficiently early to influence key project planning decisions. This will be done in accordance with the following hierarchy of action: • Avoidance • Protection • Reduction or limitation of negative impacts • On site compensation and, • Enhancement, considering the capacity and feasibility within the site, or where viable, off-site. Following this, the optimal ecological outcome for the site will be selected after liaising with representative stakeholders and the project team.	1 / 1
Le03: Planning, Liaison, Implementation & Data (Route 2)	Roles and responsibilities will be clearly defined, allocated and implemented to support successful delivery of project outcomes at an early enough stage to influence the concept design or design brief. Site preparation and construction works will be planned for and implemented at an early project stage to optimise benefits and outputs. The project team liaising and collaborating with representative stakeholders, taking into consideration data collated and shared, have implemented solutions, and measures have been selected, during site preparation and construction works.	1 / 1
Le03: Managing Negative Impacts (Route 2)	Negative impacts from site preparation and construction works will be managed according to the BREEAM 'hierarchy for managing negative loss', and the loss of ecological value will be limited as far as possible.	1 / 2
Le04: Change & Enhancement of Ecological Value	Based upon the ecological surveys undertaken, it is currently expected little opportunity exists to substantially increase the ecological value of the site to a threshold necessary to achieve the requirements of this measure. This will be further confirmed by the project Ecologist.	0 / 4
Le05: Long Term Ecology Management & Maintenance	It is expected that arrangements for the ongoing management of habitat connected to the project, and the maintenance of the ecological value of the site and its relationship to its zone of influence will not be accounted for, therefore this measure is not currently targeted.	0 / 1
Le05: Landscape & Ecology Management Plan	It is expected that a landscape and ecology management plan, covering the first five years after project completion will not be developed, given the limited scope of soft landscaping works.	0 / 1

Pollution

Pol01: Impact of Refrigerants & Leak Detection	Systems containing refrigerant will not be installed to the office areas, therefore these can be achieved by default.	3 / 3
Pol02: Local Air Quality	It is expected that heating and domestic hot water will be provided from non-combustion plant, allowing two credits to be achieved.	2 / 2
Pol03: Flood Resilience	It is expected a site-specific flood risk statement will confirm the development is situated in a flood zone that is defined as having a low annual probability of flooding, in accordance with current best practice national planning guidance.	2 / 2
Pol03: Surface Water Run Off Rate	Drainage measures will be specified so that the peak rate of run-off from the site to the watercourses (natural or municipal) shows a 30% improvement for the developed site compared with the pre-developed site. This will comply with the 1-year and 100-year return period events. Relevant maintenance agreements for the ownership, long term operation and maintenance of all specified Sustainable Drainage Systems (SuDS) will be in place. In addition, calculations will include an allowance for climate change, in accordance with current best practice planning guidance.	1 / 1
Pol03: Surface Water Run Off Rate	Flooding of property will not occur in the event of local drainage system failure (caused either by extreme rainfall or a lack of maintenance). Drainage design measures will be specified so that the post-development run-off volume, over the development lifetime, is no greater than it would have been prior to the assessed site's development. This will be for the 100-year 6-hour event, including an allowance for climate change (in accordance with current best practice planning guidance). Any additional predicted volume of run-off for this event will be prevented from leaving the site by using infiltration or other SuDS techniques.	1 / 1
Pol03: Minimising Watercourse Pollution	Where there is a high risk of contamination or spillage of substances such as petrol and oil, separators (or an equivalent system) will be specified. All water pollution prevention systems will be designed and installed in accordance with the recommendations of documents such as the SuDS manual and other relevant industry best practice. A comprehensive and up to date drainage plan of the site will also be made available for the building/site occupiers and relevant maintenance agreements for the ownership, long term operation and maintenance of all specified Sustainable Drainage Systems (SuDS) will be in place.	1 / 1
Pol04: Reduction of Night Time Light Pollution	The external lighting strategy will be designed in compliance with Table 2 (and its accompanying notes) of the ILP Guidance notes for the reduction of obtrusive light, 2011. All external lighting (except for safety and security lighting) can be automatically switched off between 23:00 and 07:00. If safety or security lighting is provided and will be used between 23:00 and 07:00, this part of the lighting system will comply with the lower levels of lighting recommended during these hours in Table 2 of the ILP's Guidance notes. Illuminated advertisements, where specified, will be designed in compliance with ILP PLG 05 The Brightness of Illuminated Advertisements.	1 / 1
Pol05: Noise Attenuation	A suitably qualified acoustic consultant will be employed to undertake a noise impact assessment in compliance with B142:2014, and any remediation measures recommended by the report will be specified and installed. The noise level from the assessed building, as measured in the locality of the nearest or most exposed noise sensitive development, will be at least 5dB lower than the background noise throughout the day and night	1 / 1

RESULTS

Based upon the inclusion of the BREEAM measures detailed within this report in the design and construction phases, the proposed development at New Lane, Havant could achieve a maximum BREEAM **'Very Good'** rating of **57.70%**. This ensures an adequate sustainability rating and maximum improvement in energy efficiency is achieved, which accurately reflects the proposed development type and function.

A summary of the anticipated score is detailed below:

Potential BREEAM Score & Rating

Section	Environmental Weighting	Credits Available	Credits Achieved	Weighted Score
Management	11.00%	18.00	13.00	7.94%
Health & Wellbeing	8.00%	10.00	3.00	2.40%
Energy	14.00%	19.00	7.00	5.15%
Transport	11.50%	12.00	3.00	2.87%
Water	7.00%	8.00	5.00	4.37%
Materials	17.50%	14.00	11.00	13.75%
Waste	7.00%	9.00	7.00	5.44%
Land Use & Ecology	15.00%	13.00	5.00	5.76%
Pollution	9.00%	11.00	11.00	9.00%
Total				56.70%
Exemplary Credits				1.00%
TOTAL BREEAM SCORE				57.70%



8 Village Way, Greenmeadow Springs Business Park, Cardiff, CF15 7NE

info@red-six.co.uk