Land at Status Park, Nobel Drive

Sustainability Statement

Job No: 4831

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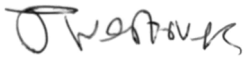


1.0 Introduction

1.1 This Sustainability Statement has been prepared to support a planning application for the redevelopment of the site at Status Park, Nobel Drive, UB3 5EY.

1.2 The report takes an overarching strategy for improvements and measures to be adopted in order to reduce the environmental impact of the scheme,

1.3 It looks primarily at measures other than those which reduce Energy Consumption and CO_2 emissions, which are outlined fully within the Energy Statement submitted with the planning application.

1.4 . These are:

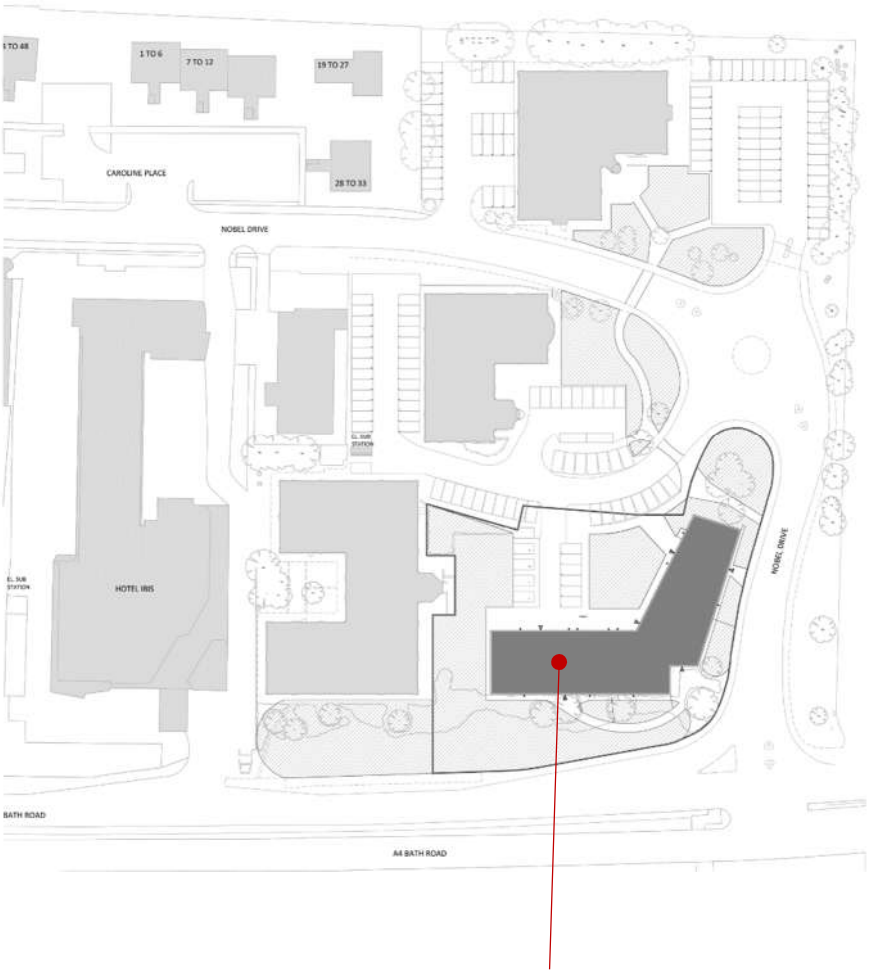
- Passive Design Measures
- Potable Water Usage
- Surface Water and Flooding
- Transport
- Sustainable Construction
- Biodiversity

2.0 Project Summary

2.1 The proposal site is s parcel of land lying between Bath Road and Nobel Drive, north of Heathrow Airport.

2.2 The proposal is to redevelop the car park to provide a six-storey building comprising of 67no residential units together with associated landscaping and car parking, along with reconfiguration of car parks at Nobel Drive and provision of additional landscaping.

2.3 The site location is shown below.



Site Location

3.0 Policy Requirements and Drivers

3.1 The relevant planning policy documents for this site, relating to sustainability are:

- The National Planning Policy Framework (NPPF)
- London Plan (2021) Chapters 1, 8, 9 and 10
- London Borough of Hillingdon Local Plan (2020)

3.2 In light of these documents and through the developer and design team's commitment to reducing the impact of the development on the environment, this report sets out some of the measures that will be adopted or considered.

4.0 Passive Design Measures

5.1 The design team will incorporate features to reduce the environmental impact of the scheme wherever possible.

5.2 Passive design is a method of using the features of the building to reduce the energy consumption and environmental impact, without the use of mechanical or electrical plant.

5.3 These techniques include solar orientation, natural ventilation, dual aspect design where possible, low-medium thermal mass, air tightness, and fenestration design.

5.4 Some of these techniques are not possible on all sites, but the design team for this project have endeavoured to include them where feasible.

5.5 Proximity to existing buildings and associated outlook from apartments has also informed orientation, massing, organisation of internal spaces and fenestration.

5.6 All apartments have access to a private outdoor space.

5.0 Potable Water Usage

5.1 DMEI 10 of the Local Plan 'Water Management, Efficiency and Quality' requires that all new development include the collection and reuse of rainwater and grey water'. Details of how this will be achieved will be provided at the Detailed Design Stage.

5.2 The policy also requires that new residential dwellings are expected to have internal water usage of less than the 105l/person/day in accordance with Building Regulations Part G

5.3 A target of 95l/person/day has been proposed for this site, which goes beyond any targets set by the local authority.

5.4 This is calculated using the Part G Water Usage tool. A version of this is used for the Code for Sustainable Homes and approved by BRE. This has been used at this early stage to give a guide to the potential internal water usage.

5.5 Please note that the overall usage is per person and so is not affected by the number of fittings installed, provided they are all the same.

5.6 The assumptions used for the calculations are.

- Basin Taps and Kitchen taps: 3l/min at 3bar
- Showers: 8l/min at 3bar
- Baths: 145l to overflow
- WCs: Dual flush - 4/2.6l
- No Waste Disposal
- No Water Softener
- Washing Machine: Default value (8.17l/kg load)
- Dishwasher: Default value (1.25l/place setting)

Total Predicted Usage 94.7l/person/day

6.0 Surface Water and Flooding

6.1 New developments should seek to mitigate against the future effects of climate change and so far as possible, reduce water runoff from the site and buildings to alleviate the problems of flooding.

6.2 A Drainage Statement has been prepared by EAS which concludes that the site is located within Flood Zone 1 which is classified as Low Risk.

6.3 There are several methods to deal with surface water runoff which can be used in isolation or in combination. Some are dependent on the building design and others are dependent on soil conditions.

6.4 At the very least, developers should aim to make the situation after construction no worse than it was before. This is considered to be the case here, as the impermeable area of the site will not increase as a result of the new development, once porous paving is taken into account.

6.5 It is proposed that the drainage strategy for the site will use a combination of SuDS features, including porous paving, underground crates and soft landscaping areas.

6.6 An extensive green roof zone is proposed and this will also help slow down water run-off at the development.

6.7 Further details of the drainage strategy are included in the Flood Risk Assessment and SuDs Statement that will be submitted separately as part of the planning application.

7.0 Transport

7.1 Transport arrangements are a key consideration for any new development. The accessibility of public transport to a site is of high importance to both developers and end users.

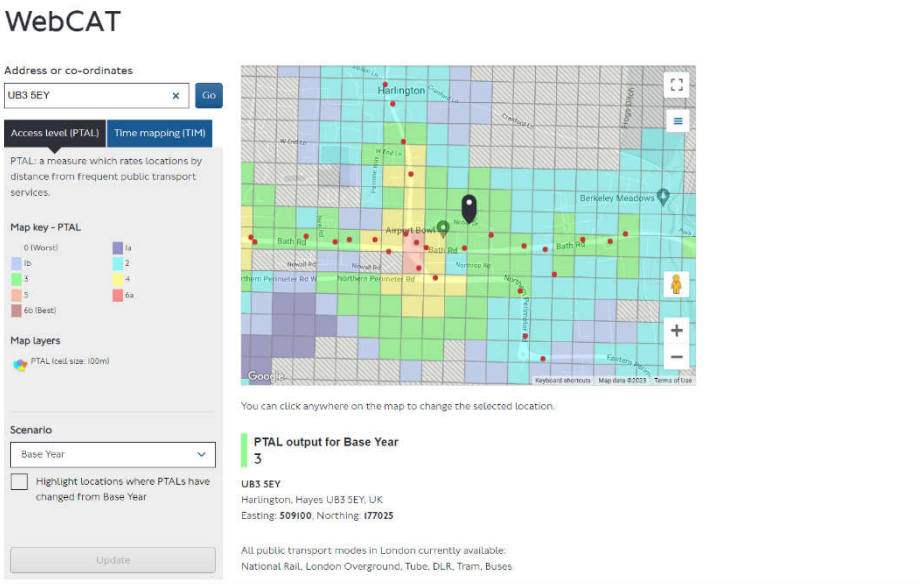
7.2 This can be assessed using the PTAL (Public Transport Access Levels) system. This site has a rating of 3, where 0 is the worst score and 6b is the best.

7.3 The site is within walking distance of ten different daytime bus routes.

7.4 Secure and accessible cycle storage is to be provided to help encourage the future occupants to make more journeys by bicycle. 108 long stay cycle spaces and fourteen short stay places will be provided in line with London Plan standards making a total of 122 spaces.

7.5 There are eleven car parking spaces proposed throughout the development., which includes the reconfiguration of adjacent car parks. This will result in an average parking ratio of 0.76 spaces per unit across the wider site.

7.6 Four of the eleven spaces will also be equipped with Electric Vehicle (EV) charging points, with remaining seven designed with passive EV provision.



Site PTAL Rating - © TFL

8.0 Sustainable Construction and materials

8.1 It is clearly important that a building should be designed to reduce its environmental impact so far as is reasonably practical and the measures proposed for doing this are detailed in this report and the accompanying Energy Statement.

8.2 Whilst the specific measures to be taken to ensure this is also mitigated will be the responsibility of the contractor once building work commences. This section sets out suitable measures that should be considered and adopted where appropriate.

8.3 Site Waste Management:

- The build will be operated under a Site Waste Management Plan which will identify the key sources of construction waste, methods for diverting this waste from landfill, identify those responsible for doing so and monitor performance.
- There are numerous tools available for doing this, including online facilities such as BRE's SMARTWaste system.
- This allows the contractor to log all waste-related activities and report on performance at all stages of the build.
- It also allows monitoring and reporting of energy and water use on site (see "Consumption Monitoring", below) and analysis of the carbon impact for transportation and material usage.
- Although Site Waste Management Plans are no longer a legal requirement, they offer significant environmental benefits and also cost savings, by encouraging waste reduction across the construction team.

8.0 Sustainable Construction

8.7 Pollution

- The contractor will have in place policies on site to minimize air and water pollution from site-based activities. Further details regarding the mitigation of dust at the site can be found in the Air Quality Assessment submitted with the planning application.
- Air and water pollution on site can have a detrimental impact on the environment and on the health of local residents
- Examples of the clauses that such policies should contain are:

8.7.1 All surface water must discharge into a surface water drain.

8.7.2 All foul water must discharge into the foul water drain.

8.7.3 All oil and diesel drums must be stored on an impervious base with oil-tight bund with no drainage outlet. All drill pipes, fill pipes and sight gauges must also be stored on this bund.

8.7.4 Leaking or empty oil drums must be removed from site and disposed of via a licensed waste disposal contractor.

8.7.5 A stand pipe and hose is to be made available at all times on site to damp down arising dust from the demolition process. Particular attention must be paid to damping down procedures during periods of dry and hot weather.

8.7.6 All skips must be covered with a suitable cover i.e. tarpaulin or plastic dust sheets.

8.7.7 Any lorries removing waste from site must be suitably covered prior to leaving site.

8.7.8 A wheel wash will be provided where practical.

8.0 Sustainable Construction

8.12 Considerate Constructors

- The Considerate Constructors scheme exists to encourage good practice within the construction industry, reduce its environmental impact and forge better relations with neighbouring residents
- The developer should be encouraged to sign up to this protocol and aim for a score which exceeds best-practice
- This will ensure the site:

  8.12..1 Has a good outward appearance

  8.12..2 Respects the community in which it exists

  8.12..3 Minimizes security and safety risks for neighbours

  8.12..4 Values its workforce and provides high welfare standards

  8.12..5 Reduces its environmental impact where possible
- These measures will also contribute to BREEAM credits if appropriate.

8.13 Consumption Monitoring

- In line with the ideals of the Site Waste Management Plan the developer will monitor resources consumption on site in line with industry KPI benchmarks.
- Electricity and water usage will be monitored on site and targets set.
- The results of the meter readings will then be compared to the set benchmark targets using industry standard KPIs so that feedback can be given to the site staff.
- This will have the effect of encouraging responsible resource usage and consumption reduction where possible.

8.0 Sustainable Construction

8.14 **Construction materials**

- Brickwork has been selected as the primary building material for its durability, high thermal mass and intrinsic sustainable qualities.
- Selected brick types are manufactured in the UK within 250 miles of the site, which contributes to achieving lower embodied carbon.
- Thick walls will allow for a good level of insulation.
- All materials will, where possible, be rated A or A+ under the BRE's Green Guide.
- A detailed material schedule will be submitted separately as part of the planning application.

9.0 Biodiversity

9.1 The extensive green roof zone will support wildlife habitats and attract new species to the neighbourhood.

9.2 The biodiversity of the site will improve from its current state as a car park.

9.3 Further details will be provided in the Landscape Plan and Biodiversity Enhancement and Management Plan, which will be submitted separately as part of the application.,

10.0 Conclusions

10.1 The Sustainability Strategy for the development has been developed with the design team to comply with the relevant environmental policies of the NPPF, The London Plan, and the Hillingdon Local Plan.

10.2 Measures to be included within the design cover areas such as reductions in potable water use, resource efficiency and pollution and biodiversity both through the build process and post-occupation,

10.3 The proposed development at Status Park, Nobel Drive, honours, and aims to go beyond, the intentions of the policy requirements in order to provide a well-designed and built development which limits its impacts on the environment both during its construction and beyond.

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