



Aviary Court, Miles Road Epsom

Sustainability Statement for Planning

Job No: 3651

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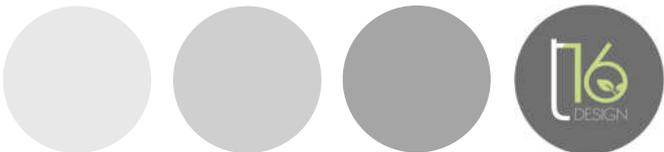
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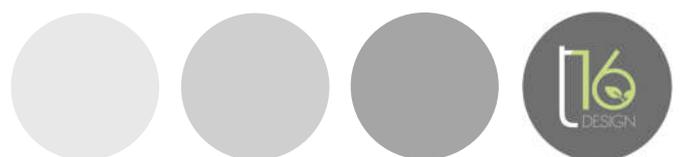
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1.0 Executive Summary

- 1.1 T16 Design has been appointed to produce this Sustainability Statement for the proposed development at Aviary Court, 138 Miles Road, Epsom KT19.
- 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 CO₂ emissions. These aspects are dealt with in the Energy Statement, submitted separately.



2.0 Project Summary

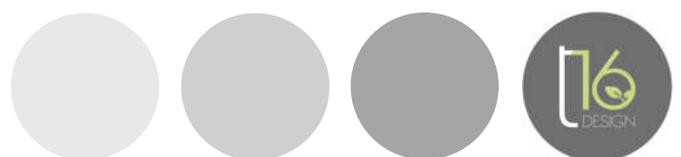
- 2.1 The proposal site is located at 138 Miles Road, Epsom.
- 2.2 The site is currently being converted from office to residential use under previous planning permissions.
- 2.3 Permission was granted under application 17/01758/PDCOU for the conversion of Block A and B office floorspace to create 8 apartments. An extension to Block B to provide a further two residential units was granted under application 19/00223/FUL.
- 2.4 The proposal covered by this Energy Statement is to add a mansard level to both blocks and a three-storey extension to Block B to provide an additional six residential units.
- 2.5 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:
- Epsom & Ewell Borough Council Revised Sustainable Design Supplementary Planning Document (2016)
 - Epsom & Ewell Borough Council Core Strategy Policy CS6
- 3.2 In light of these policy requirements 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.

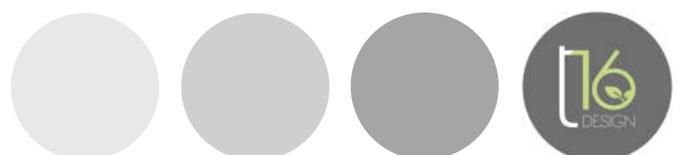


4.0 Passive Design Measures

- 4.1 The design team will incorporate features to reduce the environmental impact of the scheme wherever possible.
- 4.2 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.
- 4.3 These techniques include solar orientation, natural ventilation, dual aspect design, thermal mass, air tightness, and fenestration design.
- 4.4 Some of these techniques are not possible on all sites, but the design team for this project have endeavoured to include them where feasible.
- 4.5 A building with high thermal mass will take longer to heat up and longer to cool down, which generally has the effect of reducing the energy required to keep it at an acceptable temperature.

Air Quality

- 4.6 As the scheme consists of under ten units, it is considered to be a minor development. Therefore, an Air Quality Impact Assessment is only required if the scheme is located within an Air Quality Management Area.
- 4.7 To the best of our knowledge, this development is not within an Air Quality Management Area.

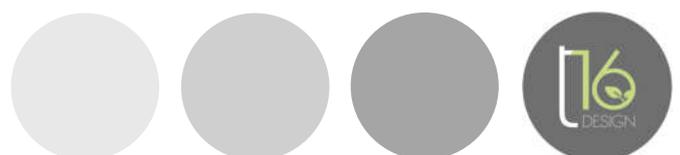


5.0 Water Quality and Consumption

- 5.1 According to the guidance within the council's Revised Sustainable Design Guide, only minor developments within Source Protection Zones (SPZ) are required to demonstrate the impacts of the scheme on water quality. To the best of our knowledge this scheme is not within a SPZ.
- 5.2 It is a policy requirement that new residential dwellings are expected to have internal water usage of less than the 110L/person/day in accordance with Building Regulations Part G. A target of 95L/person/day has been proposed for this site.
- 5.3 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.
- 5.4 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.
- 5.5 The assumptions used for the calculations are:

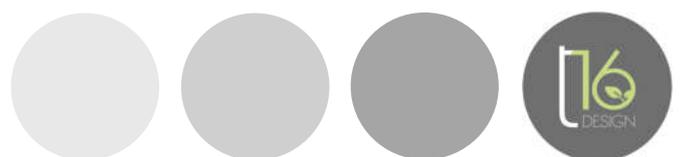
- Basin Taps and Kitchen taps: 3l/min at 3bar
- Showers: 8l/min at 3bar
- Baths: 145l to overflow
- WCs: Dual flush - 4/2.6l
- No Waste Disposal
- No Water Softener
- Washing Machine: Default value (8.17l/kg load)
- Dishwasher: Default value (1.25l/place setting)

Total Predicted Usage 94.7L/person/day



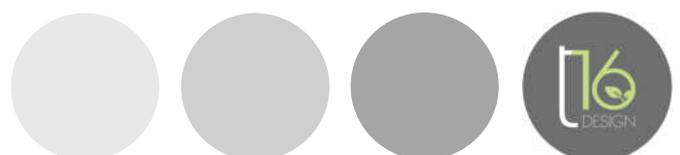
6.0 Surface Water and Flooding

- 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 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.
- 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 The Surface Water Run Off strategy here will be through the use of soakaways. Further details of the drainage strategy will be provided separately.
- 6.5 The site is located in Flood Zone 1, which means it is at a low risk of flooding from all sources.
- 6.6 A revised Flood Risk Assessment will be provided 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 The site is within a short walking distance of Epsom Rail Station and services to London Waterloo and London Victoria.
- 7.3 Ten secure and accessible cycle storage spaces will be provided for these six new-build units to help encourage the future occupants to make more journeys by bicycle.
- 7.4 Sufficient car parking spaces will be provided for the development to meet the council's parking standards.

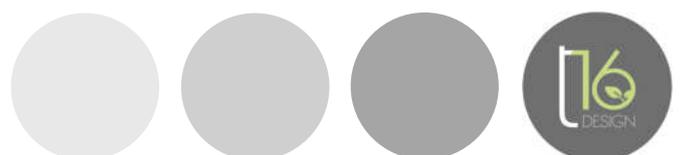


8.0 Sustainable Construction

- 8.1 It is clearly important that a building should be designed to reduce its environmental impact so far as 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, the section sets out suitable measures that should be considered and adopted where appropriate.
- 8.3 It is strongly recommended that locally sourced and recycled materials are used wherever possible in accordance with the council's Sustainable Design guidance.
- 8.4 Details of the proposed materials will be submitted separately as part of the planning application.

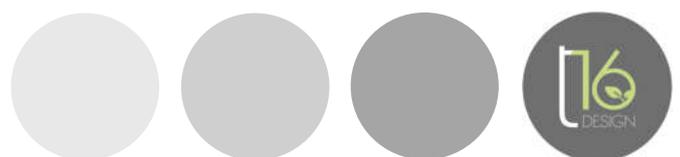
Site Waste Management

- 8.5 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.
- 8.6 There are numerous tools available for doing this, including online facilities such as BRE's SMARTWaste system.
- 8.7 This allows the contractor to log all waste-related activities and report on performance at all stages of the build.
- 8.8 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.
- 8.9 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.



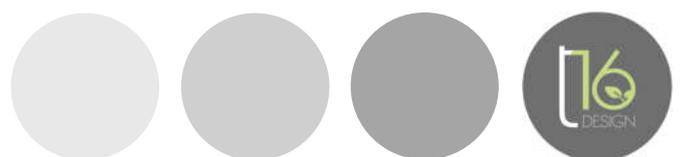
Pollution

- 8.10 The contractor will have in place policies on site to minimize air and water pollution from site-based activities.
- 8.11 Air and water pollution on site can have a detrimental impact on the environment and on the health of local residents
- 8.12 Examples of the clauses that such policies should contain are:
- All surface water must discharge into a surface water drain
 - All foul water must discharge into the foul water drain
 - 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.
 - Leaking or empty oil drums must be removed from site and disposed of via a licensed waste disposal contractor
 - 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.
 - All skips must be covered with a suitable cover i.e. tarpaulin or plastic dust sheets.
 - Any lorries removing waste from site must be suitably covered prior to leaving site.
 - A wheel wash will be provided where practical.



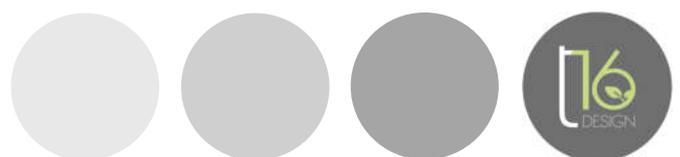
Consumption monitoring

- 8.13 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
- 8.14 Electricity and water usage will be monitored on site and targets set.
- 8.15 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.
- 8.16 This will have the effect of encouraging responsible resource usage and consumption reduction where possible.



9.0 Conclusion

- 9.1 The sustainability strategy for the development has been developed with the design team to comply with the relevant sustainability policies of Epsom and Ewell Council.
- 9.2 Measures to be included within the design cover areas such as reductions in potable water use, resource efficiency and pollution reduction both through the build process and post-occupation,
- 9.3 The proposed development at Aviary Court, 138 Miles Road, honours the intentions of the policies set out by Epsom & Ewell Council 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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