

Wimbledon Park Golf Club

in the London Boroughs of Merton and Wandsworth

The proposal

Functional extension of All England Lawn Tennis Club to include a new show court (6,000-8,000 seats), demountable temporary stands, other tennis infrastructure and landscaping works.

The applicant

The applicant is **AELTC** and the architect is **Allies and Morrison**.

Meeting attendees

GLA

- [REDACTED] Head of Development Management
- [REDACTED] Team Leader – Development Management

Applicant team

- [REDACTED] AELTC
- [REDACTED] Rolf Judd
- [REDACTED] Allies and Morrison
- [REDACTED] LUC

1 The advice given by officers does not constitute a formal response or decision by the Mayor with regard to future planning applications. Any views or opinions expressed are without prejudice to the Mayor's formal consideration of an application. It is recommended that the applicant pursues Level 2 GLA pre-application advice in due course, to receive advice across the full breadth of strategic issues that the Mayor will consider. Further information of the GLA pre-application service is available on the City Hall website at: www.london.gov.uk/what-we-do/planning/planning-applications-and-decisions/pre-planning-application-meeting-service.

Summary of meeting discussions

2 The applicant team outlined the site and local planning context. It is noted that Wimbledon Park Golf Club is designated as Metropolitan Open Land and is also a Grade II* Registered Park and Garden. The formal landscaping of Wimbledon Park dates back to C16, and following successive reworking, part of an C18 park survives (having been extended and re-landscaped by Lancelot Brown for the first Earl Spencer). It is understood that the Grade II* Registered Park and Garden is currently identified as 'at risk' given the progressive erosion of historic landscape features due to the modern golf course layout and planting.

3 The applicant team outlined proposals for a functional extension of the All England Lawn Tennis Club to include a new show court (6,000-8,000 seats),

demountable temporary stands, other tennis infrastructure and landscaping works intended to respond to the history of Wimbledon Park. The rationale for the extension is to allow for qualifying rounds to be played at the Wimbledon site – creating a three-week event (rather than two weeks currently) in line with other major world tennis tournaments. Summary advice in relation to the principle of this development in strategic planning terms is set out below.

Principle of development

Sports and recreation

4 The applicant seeks an extension of the All England Lawn Tennis Club (AELTC) in order to host tournament qualifying rounds at the Wimbledon site and to reinforce the function and status of this world-renowned elite sporting venue.

5 London Plan Policy 3.19 and Intend to Publish London Plan Policy S5 seek to ensure there is sufficient supply of good quality sports and recreation facilities in the capital. These policies acknowledge that existing open space may come under pressure to meet need for built sports facilities. In this regard Paragraph 5.5.3 in support of Intend to Publish London Plan Policy S5 states:

“Built sports facilities should only be accommodated on green open space if that area has been identified as surplus to requirements as per an open space strategy or the development is for alternative sports and recreation provision, the needs for which clearly outweigh the loss of green open space.”

6 In this case it is noted that Wimbledon Park Golf Club has a prevailing sports use as a golf course. GLA would, nevertheless, still expect this scheme to be considered in the context of the local open space assessments for Merton and Wandsworth, and to explore any and all opportunities to mitigate any existing instances of local open space deficiency as part of the package of public benefits. In principle considerations with respect to the need to ‘outweigh the loss of green open space’ (Metropolitan Open Land in this case) are set out below.

Metropolitan Open Land

7 The London Plan and Intend to Publish London Plan afford Metropolitan Open Land (MOL) the same level of protection as Green Belt (refer to London Plan Policy 7.17, Intend to Publish London Plan Policy G3 and the NPPF).

8 Whilst the primary function of the proposed AELTC extension will be for qualifying rounds of lawn tennis (appropriate outdoor sport), the associated grass courts would necessarily be accompanied by other temporary and permanent infrastructure and development (for example the new show court) that would be considered inappropriate development for the purposes of the NPPF and London Plan. Therefore, it will be necessary for the applicant to justify the existence of very special circumstances that would clearly outweigh the harm to MOL and any other harm. This should address the need case and should also include a package of public benefits that individually or collectively would clearly outweigh any harm.

9 Based on the information provided to date, the applicant team are looking at a varied package of ‘planning gain’ focusing on delivering public benefits and

community outreach well beyond the proposed three-week duration of the tennis tournament on-site. This is strongly supported. The details are still emerging at this stage, but the key themes are around increased community access and outreach, improved public open space, ecological enhancement and historic landscape restoration. GLA officers broadly support the emerging concepts, however, it is essential that the key MOL openness impacts and public benefits of the scheme are scoped out at the earliest possible stage so that a clear steer on overall acceptability in planning terms may be given. In this regard GLA officers expect to discuss the proposed development and public benefits package further at a level 2 GLA pre-application meeting in due course.

Grade II* Registered Park and Garden

10 As discussed above, Wimbledon Park (Grade II* Registered Park and Garden) is registered as 'at risk' in heritage terms. It is understood that the re-landscaping of the site with long fairways for its use as a golf course has effectively begun to erode some of the surviving C18 park features. Notwithstanding this, it is acknowledged that much of the shrub and tree planting introduced at the site by the golf club (outside the more heavily mown and managed areas of the course) has reached a good level of maturity, and now positively contributes to local ecology and biodiversity. Accordingly, GLA officers seek a carefully coordinated and multidisciplinary approach to landscape enhancement and Registered Park and Garden restoration. This should ensure that the key historic characteristics of Wimbledon Park may be revealed/appropriately referenced, whilst allowing for high quality components of more recent planting (especially mature/semi mature native trees) to be sympathetically retained wherever possible. Where an appropriate balance can be found, GLA officers are of the view that landscaping enhancements to the Grade II* Registered Park and Garden could form an important part of the public benefits package of the scheme. GLA officers expect to discuss this further at a level 2 meeting in due course, and prior to that, the applicant team is strongly encouraged to engage with The Gardens Trust.

Conclusion

11 The principle of extension of the AELTC in order to host tournament qualifying rounds at the Wimbledon site and reinforce the function and status of this world-renowned sporting venue is strongly supported in strategic planning terms. Notwithstanding this, given the proposal would include 'inappropriate development' on MOL, very special circumstances must be demonstrated that would clearly outweigh harm to MOL openness and any other harm. GLA officers are of the view that landscaping enhancements to the Grade II* Registered Park and Garden could form an important part of the public benefits package of the scheme. Nevertheless, a carefully coordinated and multidisciplinary approach is required in this regard in order to appropriately balance heritage and ecological priorities at this site. The applicant is strongly encouraged to engage further with GLA officers in order to discuss the proposed development and public benefits package further at a level 2 GLA pre-application meeting in due course.

for further information, contact GLA Planning Unit (Development Management Team):
Lucinda Turner, Assistant Director - Planning

[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

Good Growth

[REDACTED]

Our ref: 2021/0388/P2I

Date: 07 July 2021

By email

Dear [REDACTED]

Town & Country Planning Act 1990 (as amended); Greater London Authority Act 1999 & 2007; Town & Country Planning (Mayor of London) Order 2008

Site: Wimbledon Park Golf Course, Home Park Road, Wimbledon, London, SW19 7HR

LPA: London Boroughs of Merton and Wandsworth

Our reference: 2021/0388/P2I

Further to the pre-planning application meeting held on 28 April 2021, I enclose a copy of the GLA's assessment which sets out our advice and matters which will need to be fully addressed before the application is submitted to the local planning authority.

The advice given by officers does not constitute a formal response or decision by the Mayor with regard to future planning applications. Any views or opinions expressed are without prejudice to the Mayor's formal consideration of the application.

Yours sincerely

[REDACTED]
Head of Development Management

cc [REDACTED] Deputy Head of Development Management
TfL

Wimbledon Park Golf Course

Local Planning Authorities: Merton, Wandsworth

The proposal

Functional extension of the All England Lawn Tennis Club to include new tennis courts and tennis related infrastructure to enable the Wimbledon Championship tournament qualifying to be hosted on the expanded site.

The applicant

The applicant is **AELTC** and the architect is **Allies and Morrison**.

Assessment summary

The principle of redevelopment of the site to provide tennis and tennis related infrastructure could be acceptable in strategic planning terms; however, it would constitute inappropriate development on MOL and would therefore need to be robustly justified by very special circumstances which clearly outweigh and harm to the MOL by way of openness or otherwise per the NPPF and London Plan Policy G3. The applicant should also demonstrate how the benefits of the proposed tennis facilities would clearly outweigh the loss of the existing golf facilities and accord with both boroughs' needs for sport and recreational facilities and open space in line with London Plan Policy S5. Development of this site would provide an excellent opportunity to celebrate the site's historic landscape; however, the scale and nature of the proposals would have an unmistakable impact on the site and its surrounds, creating a very different sense of place from what is there currently. For this reason, the proposed design will have to be carefully considered, in particular how the proposed structures would integrate with and celebrate the landscape and natural setting. Matters raised in the transport and sustainable development sections should also be addressed in any forthcoming application.

Key next steps

The future application will need to address the issues raised in this report with respect to the **land use principle, urban design, heritage, transport, and sustainable development**.

Context

- 1 On 28 April 2021 a pre-planning application meeting to discuss a proposal to develop the above site for the above uses was held virtually with the following attendees:

GLA group

- [REDACTED], Case Officer
- [REDACTED], Team Leader, Development Management
- [REDACTED], Team Leader, Urban Design
- [REDACTED] TfL Spatial Planning
- [REDACTED], TfL Spatial Planning

Local Authority

- [REDACTED], London Borough of Merton
- [REDACTED], London Borough of Merton

Applicant

- [REDACTED], AELTC
- [REDACTED], AELTC
- [REDACTED], Rolfe Judd
- [REDACTED], Rolfe Judd
- [REDACTED], Rolfe Judd
- [REDACTED], Allies and Morrison
- [REDACTED], Allies and Morrison
- [REDACTED], LUC
- [REDACTED], LUC
- [REDACTED], Buro Happold
- [REDACTED], Buro Happold

- 2 The advice given by GLA officers does not constitute a formal response or decision by the Mayor with regard to future planning applications. Any views or opinions expressed are without prejudice to the Mayor's formal consideration of an application.

Site description

- 3 The site comprises the Wimbledon Park Golf Club, which is designated Metropolitan Open Land (MOL). The site straddles the borough boundary between Merton and Wandsworth with the bulk of the site being in Merton. The irregular shaped site is bounded by Church Road, Wimbledon Park, and Home Park Road; is adjacent the existing All England Lawn and Tennis Club grounds; and envelops the Wimbledon Club – a private club which does not form part of the site or the proposals.
- 4 The site dates to the 16th century, when it was known as Wimbledon Palace, and was significantly relandscaped in the 18th century by Lancelot 'Capability' Brown for the 1st Earl of Spencer. The garden site was then converted into a golf course in the early 20th century. The existing site is subject to several strategic designations as a Grade II* Registered Park and Garden (although it is on Historic England's 'At Risk' Register owing to erosion of the 18th century design through more modern

landscaping), a Site of Importance for Nature Conservation (SINC), National Priority Habitat, and Ancient Woodland. The site also forms part of the Wimbledon North Conservation Area. The site is also home to several veteran trees including 200-year-old oaks.

- 5 The site has a Public Transport Accessibility Level ranging from 1a to 3 on a scale of 0-6b where 6b is the highest. The site is within 1 kilometre of Wimbledon Park station (District Line) and Wimbledon station (South Western Railway, Thameslink, and Tram service). There is one bus route within walking distance of the site and it is approximately 1.5 kilometres from the A217 Garratt Lane, which forms part of the Strategic Road Network (SRN).

Case history

- 6 A pre-application 'in principle' meeting was held with the GLA and an advice note was subsequently issued on 5 February 2021. The advice from the meeting was that the principle of an extension to the All England Lawn Tennis Club in order to host tournament qualifying rounds at the Wimbledon site and reinforce the function and status of this world-renowned sporting venue is strongly supported in strategic planning terms. That notwithstanding, the development would constitute 'inappropriate development' on MOL, and therefore very special circumstances (VSC) would have to be demonstrated that clearly outweigh any harm to the MOL by way of its openness or otherwise. Officers posited that landscaping enhancements to the Grade II* Registered Park and Garden could form part of the public benefits package of the scheme; however, cautioned that that a carefully coordinated and multidisciplinary approach would be required to balance any proposed changes with the heritage and ecological priorities and considerations.

Details of this proposal

- 7 The applicant is proposing the provision of new tennis courts and tennis related infrastructure (temporary and permanent) to enable the Wimbledon Championship tournament qualifying to be hosted on the expanded site. The proposed permanent infrastructure includes a new 8,000-person capacity show court, several tennis courts, maintenance facilities, player facilities, guest hospitality and comfort facilities, a clubhouse, and an energy centre. The proposed temporary infrastructure includes entrance structures and seating stands.
- 8 While the full scope of the application hadn't been determined by the time of the meeting, the applicant suggested that it is likely to be a hybrid application for a masterplan covering the entirety of the site.
- 9 The future application is expected to be referable to the Mayor under the following categories of the Mayor of London Order 2008:
 - 1B(c) -- Development which comprises or includes the erection of a building or buildings outside Central London and with a total floorspace of more than 15,000 square metres;
 - 1C(c) -- Development which comprises or includes the erection of a building... more than 30 metres high and is outside of the City of London; and

- 3D -- Development on land allocated as Green Belt or Metropolitan Open Land in the development plan.... And which would involve the construction of a building with a floorspace of more than 1,000 square metres or a material change in the use of such a building.

Strategic planning issues and relevant policies and guidance

- 10 For the purposes of Section 38(6) of the Planning and Compulsory Purchase Act 2004, the development plan in force for the area comprises the Merton Core Planning Strategy 2011-2026 (2011), Merton Estates Local Plan (2018), Wandsworth Core Strategy (2016), Wandsworth Development Management Policies Document (2016), Wandsworth Site Specific Allocations Document (2016), and the London Plan 2021.
- 11 The following are relevant material considerations:
 - The National Planning Policy Framework and National Planning Practice Guidance;
 - Wandsworth Draft Local Plan (Regulation 18) (November 2020); and
 - Merton New Local Plan (Regulation 18)
- 12 The relevant issues, corresponding strategic policies and guidance (supplementary planning guidance (SPG) and London Plan guidance (LPG)), are as follows:

| | |
|---------------------------|---|
| • MOL | <i>London Plan;</i> |
| • Sports facilities | <i>London Plan; Social Infrastructure SPG;</i> |
| • Urban design | <i>London Plan; Character and Context SPG; Public London Charter draft LPG;</i> |
| • Heritage | <i>London Plan;</i> |
| • Inclusive access | <i>London Plan; Accessible London: achieving an inclusive environment SPG; Public London Charter draft LPG</i> |
| • Sustainable development | <i>London Plan; Circular Economy Statements draft LPG; Whole-life Carbon Assessments draft LPG; 'Be Seen' Energy Monitoring Guidance draft LPG; Mayor's Environment Strategy;</i> |
| • Transport and parking | <i>London Plan; the Mayor's Transport Strategy;</i> |
| • Biodiversity | <i>London Plan; the Mayor's Environment Strategy</i> |

Summary of meeting discussion

- 13 Following a presentation of the proposed scheme from the applicant team, meeting discussions covered strategic issues with respect to the land use principle, design, and transport. Based on the information made available to date, GLA officer advice on these issues is set out within the sections that follow.

Land use principle

Metropolitan Open Land

- 14 London Plan Policy G3 affords Metropolitan Open Land the same status and level of protection as the Green Belt, directing the refusal of development proposals except ancillary facilities for appropriate uses where they maintain the openness of the MOL or where they have been robustly justified by very special circumstances. This policy emphasises that, among other functional characteristics, MOL should contribute to the physical structure of London by being clearly distinguishable from built up area and form part of a strategic corridor, node, or link in the network of green infrastructure.
- 15 Paragraph 145 of the NPPF establishes that all development on the Green Belt (and therefore MOL) is inappropriate and, therefore, harmful subject to a limited range of specific exceptions. In this instance, exceptions test (b) should be considered:

The provision of appropriate facilities (in connection with the existing use of land or a change of use) for outdoor sport, outdoor recreation, cemeteries and burial grounds and allotments; as long as the facilities preserve the openness of the Green Belt and do not conflict with the purposes of including land within it.

- 16 Fundamentally, the applicant is proposing the development of facilities for outdoor sport; however, it was clear in the pre-application meeting that the scale of the proposed tennis facilities, the show court in particular, would in all likelihood not preserve the physical and visual openness of the MOL. Moreover, at the meeting the applicant indicated that during the tournament the proposed facilities would attract at least 8,000 additional spectators to the grounds in addition to tournament staff and participants. The cumulative impacts of the increased traffic to the site would also inevitably compromise the site's openness during tournament time. For these reasons, exceptions test (b) is unlikely to apply in this instance. The applicant will therefore need to put forward a very special circumstances case. The NPPF states that when considering applications, substantial weight should be given to any harm to the Green Belt (and therefore MOL) and that very special circumstances will not exist unless the potential harm is clearly outweighed by other considerations.
- 17 Based on the information provided to date, the applicant team are considering a varied package of public benefits including biodiversity and ecological improvements, landscape enhancements (including restoration of historic landscape features) which would enable the site to be removed from the 'At Risk' Register, park access and use of facilities (outside of tournament time), and community outreach. While the details of the proposed access and outreach are still emerging, the aspiration to provide access and outreach beyond the tournament period is strongly supported. The applicant should clarify the details of the proposed public benefits package including management arrangements and any possible constraints to the proposed public access and/or use of the facilities as part of the upcoming submission. A thorough assessment of the existing and proposed openness of the MOL using appropriate figures and diagrams should also form part of the application submission.

Sport and recreational use

- 18 London Plan Policy S5 seeks to ensure that there is a sufficient supply of good quality sports and recreation facilities in London. This policy instructs that existing sports and recreational land/facilities should be retained unless an assessment shows that the land/facilities are surplus to requirements (at the local and sub-regional level) or the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use. Where new facilities are proposed on existing open space, this policy instructs proposals to be considered against any relevant policies protecting that open space, in this case London Plan Policy G3 Metropolitan Open Land, as well as against the borough's needs and opportunities for sports facilities and the potential impact of the development. The policy further sets an expectation that development proposals maximise the multiple use of facilities. The supporting text for this policy recognises that specialist sporting venues and stadiums have a role to play in providing facilities that enable wider access to sport as well as possessing an inherent cultural value.
- 19 The proposal would result in the loss of the Wimbledon Park Golf Club, an existing golf facility. Consequently, any forthcoming application should demonstrate how the benefits of the proposed tennis facilities would clearly outweigh the loss of the existing golf facilities. In addition to addressing the requirements of London Plan Policy G3 (as discussed in the paragraphs above), the applicant should demonstrate how the proposed facilities would address Merton and Wandsworth's current and future needs for sport and recreational facilities and open space.

Urban design and heritage

Development layout

- 20 Overall, the buildings and landscape should be closely integrated to emphasise the primacy of the site's natural setting and give the feel of structures within a park.
- 21 The positioning of the proposed new show court makes sense relative to the existing AELTC facilities as well as the site's layout and surroundings.
- 22 While it is understood that the extent of public access to the site outside of tournament time is as yet undecided, it would be helpful to understand how the publicly accessible or community uses would be accessed, given security and management constraints. The applicant should therefore clarify how the site would integrate with and be accessed from the wider public realm, including any barriers to access, as part of any forthcoming application.

Scale, massing, and architecture

- 23 The proposed scale and massing of the new show court could be justifiable in design terms; however, it will need to be considered in the context of the MOL setting, with the impacts on openness and balance of public benefits assessed per the policy tests mentioned above. The applicant should also work with local authority officers to ensure the acceptability of the proposed heights and massing in line with local policies.
- 24 The architectural approach based on the concept drawing and precedent imagery presented at the meeting appears promising; however, the transformational nature of this proposal cannot be hidden. This would be a very substantial development,

which would have an unmistakable impact on the site and its surrounds, creating a very different sense of place from what is there currently. For this reason, the applicant should include as much detail as possible regarding the proposed design and materiality in the application submission. Appropriate views should also be included to allow for a full consideration of the proposal and its impacts.

- 25 Developing a coherent language for the proposed ancillary buildings will also be important for the success of the scheme. Details regarding these structures and how they would integrate with the landscaping should not be overlooked and should form part of the application submission.

Landscaping

- 26 A publicly accessible park should be a fundamental principle of the overall design concept for this site. This would necessitate a brief or definition to clarify what a successful park in this context would entail. This aspect was not sufficiently clear in the meeting and should be expanded upon in the forthcoming submission.
- 27 The landscape design for the site should be developed as a natural evolution from the historic design. The design development should be guided by both the London Plan and Historic England's principles for heritage assets, as well as engagement with The Gardens Trust. It will also be vitally important to show how the proposed tennis courts, servicing requirements, and circulation spaces would integrate into the landscaping design concept both during the day and at night. Demonstration that this integration can be successfully achieved would be foundational for any very special circumstances case.
- 28 It is noted that several mature/veteran trees exist on site. Although these trees do not form part of the historic landscape, given their value it is important that they be retained as part of any future scheme. The intention to work the landscape design around the retention of these trees is therefore welcomed.

Fire safety

- 29 In line with London Plan Policy D12, the future application should be accompanied by a fire statement, prepared by a suitably qualified third party assessor, demonstrating how the development proposals would achieve the highest standards of fire safety, including details of construction methods and materials, means of escape, fire safety features and means of access for fire service personnel.
- 30 Further to the above, Policy D5 within the London Plan seeks to ensure that developments incorporate safe and dignified emergency evacuation for all building users. In all developments where lifts are installed, as a minimum, at least one lift per core (or more subject to capacity assessments) should be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the buildings.

Inclusive access

- 31 Policy D3 of the London Plan seeks to ensure that new development achieves the highest standards of accessible and inclusive design (not just the minimum). The future application should ensure that the development: can be entered and used safely, easily and with dignity by all; is convenient and welcoming (with no disabling

barriers); and, provides independent access without additional undue effort, separation or special treatment.

Transport

Transport assessment

- 32 A robust transport assessment (TA) should accompany the planning application and should be developed with regards to the London Plan policy and TfL guidance, in particular the Healthy Streets Approach and Vision Zero accident reduction targets. Further details on TA best practice can be found [here](#).
- 33 The TA should contain a multi-modal trip generation assessment and depending on the likely development impact, mitigation measures or contributions may be sought to maintain or enhance the surrounding transport network.

Healthy Streets and Vision Zero

- 34 The applicant should ensure that the Healthy Streets approach is considered both throughout the site and within the local area, including pedestrian and cycle routes to all transport nodes. In terms of Healthy Streets, the development proposals should:
- Demonstrate how they will deliver improvements that support the ten Healthy Streets Indicators in line with [guidance](#),
 - Reduce the dominance of vehicles on London's streets whether stationary or moving, and
 - Be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport.
- 35 An Active Travel Zone Assessment is also required for key routes to local amenities. Accident analysis is required and should identify measures which can be used to eliminate accidents and should demonstrate how the scheme will contribute towards the Vision Zero approach.

Car parking

- 36 From the pre-application meeting, it is understood that the development will reduce existing on-site car parking provisions. This is supported as it is in line with the aims of the London Plan and Mayor's Transport Strategy to increase active and sustainable modes of travel. All parking spaces should be provided electric vehicle charging infrastructure in line with the London Plan Policy T6.
- 37 A Car Park Management Plan demonstrating how car parking will be monitored and designed so that it can be repurposed in the future should accompany the planning application.

Buses

- 38 From the pre-application meeting, it is understood that bus route 493 will be diverted during the Championships. Further information on the 493-bus diversion should be provided with the planning application and should be discussed and agreed with TfL.

Travel planning

- 39 A Travel Plan is required. It should be reflective of the expected shift from car travel to active travel, as set out in the Mayor's Transport Strategy and the London Plan.

Deliveries and servicing

- 40 Information on delivery and servicing should be provided in a Delivery and Servicing Plan (DSP). Guidance can be found [here](#).

Construction logistics

- 41 A Construction Logistics Plan (CLP) should be provided in line with the London Plan Policy T7, approved by Merton Council and TfL, and secured by condition.

Sustainable and green infrastructure

Energy strategy

- 42 Applicants should follow the [GLA Energy Assessment Guidance 2020](#) which sets out the information that should be provided within the energy assessment to be submitted at Stage 1.

Net zero carbon target

- 43 The London Plan 2021 requires all major developments (residential and non-residential) to meet a net-zero carbon target. This should be met with a minimum on-site 35% reduction in carbon emissions beyond Part L of 2013 Building Regulations with any carbon shortfall to net zero being paid into the relevant borough's carbon offset fund.
- 44 Applicants should submit a completed [Carbon Emissions Reporting spreadsheet](#) alongside their Stage 1 application to confirm the anticipated carbon performance of the development and should clearly set out the carbon emission factors they are proposing to use in their energy assessment. Although results for both sets of carbon emission factors should be submitted, applicants are encouraged to use the SAP 10.0 carbon emission factors for referable applications when estimating carbon dioxide emission performance against London Plan policies. For developments in Heat Network Priority Areas with the potential to connect to a planned or existing district heating network (DHN) the SAP 2012 emission factors may be used provided that the heat network operator has developed, or is in the process of developing, a strategy to decarbonise the network which has been agreed with the GLA.
- 45 The carbon emission figures should be reported against a Part L 2013 baseline. Sample SAP full calculation worksheets (both DER and TER sheets) and BRUKL sheets for all stages of the energy hierarchy should be provided to support the savings claimed.

Be Lean

- 46 Applicants are expected to meet the London Plan energy efficiency targets:
- a. **Non-residential** – at least a 15% improvement on 2013 Building Regulations from energy efficiency measures alone

- 47 The applicant will be expected to consider and minimise the estimated energy costs to occupants and outline how they are committed to protecting the consumer from high prices. See the guidance for further detail.

Energy flexibility

- 48 Applicants will be expected to investigate the potential for energy flexibility in new developments, include proposals to reduce the amount of capacity required for each site and to reduce peak demand. The measures followed to achieve this should be set out in their energy assessment. See the 2020 guidance for further details. Thermal as well as electrical storage measures should be considered.

Cooling and overheating

- 49 Evidence should be provided on how the demand for cooling and the overheating risk will be minimised through passive design in line with the cooling hierarchy. Dynamic overheating modelling in line with CIBSE Guidance should be carried out (TM59 for residential and TM52 for non-residential) for all TM49 weather scenarios.
- 50 The area weighted average (MJ/m²) and total (MJ/year) cooling demand for the actual and notional building should be provided and the applicant should demonstrate that the actual building's cooling demand is lower than the notional.

Be Clean

- 51 The applicant should investigate opportunities for connection to nearby existing or planned district heating networks (DHNs). Where such opportunities exist, this should be the priority for supplying heat to the site in line with the London Plan heating hierarchy. Evidence of this investigation should be provided including evidence of active two-way communication with the network operator, the local authority and other relevant parties. This should include information on connection timescales and confirmation that the network has available capacity. See the guidance for full details on the information to be provided.
- 52 The site should be provided with a single point of connection and a communal heating network where all buildings/uses on site will be connected. Relevant drawings/schematics demonstrating the above should be provided.
- 53 The applicant should provide evidence confirming that the development is future proofed for connection to wider district networks now or in the future, where an immediate connection is not available.
- 54 Where a DHN connection is not available, either now or in the future, applicants should follow the London Plan heating hierarchy to identify a suitable communal heating system for the site.
- 55 The London Plan limits the role of CHP to low-emission CHP and only in instances where it can support the delivery of an area-wide heat network at large, strategic sites. Applicants proposing to use low-emission CHP will be asked to provide sufficient information to justify its use and strategic role while ensuring that the carbon and air quality impact is minimised.

Be Green

- 56 All major development proposals should maximise opportunities for renewable energy generation by producing, using, and storing renewable energy on-site. This is regardless of whether the 35% on-site target has already been met through earlier stages of the energy hierarchy.
- 57 Solar PV should be maximised; the applicant proposes this and is seeking to fully exploit both the roof (with low angle E/W panels) and potentially considering BIPV as well. This is welcomed. Applicants should submit the total PV system output (kWp) and a plan showing that the proposed installation has been maximised for the available roof area and clearly outlining any constraints to further PV.
- 58 Should heat pumps be proposed, the applicant will be expected to demonstrate a high specification of energy efficiency measures under *Be Lean*, a thorough performance analysis of the heat pump system and, where there are opportunities for DHN connection, that the system is compatible. The detail submitted on heat pumps should include:
- An estimate of the heating and/or cooling energy (MWh/annum) the heat pumps would provide to the development and the percentage of contribution to the site's heat loads.
 - Details of how the Seasonal Coefficient of Performance (SCOP) and Seasonal Energy Efficiency ratio (SEER) has been calculated for the energy modelling. This should be based on a dynamic calculation of the system boundaries over the course of a year i.e. incorporating variations in source temperatures and the design sink temperatures (for space heat and hot water).
 - The expected heat source temperature and the heat distribution system temperature with an explanation of how the difference will be minimised to ensure the system runs efficiently. The distribution loss factor should be calculated based on the above information and used for calculation purposes.
 - Whether any additional technology is required for top up or during peak loads (e.g. hot water supply) and how this has been incorporated into the energy modelling assumptions.

Carbon offsetting

- 59 The applicant should maximise carbon emission reductions on-site. Should the site fall short of the carbon reduction targets and clearly demonstrate that no further carbon savings can be achieved, the applicant would be required to make a cash-in-lieu contribution to the boroughs' carbon offset fund using the GLA's recommended carbon offset price or, where a local price has been set, the borough's' carbon offset price.
- 60 Energy strategies should provide a calculation of the shortfall in carbon emissions and the offset payment that will be made to the borough.

Whole Life-Cycle Carbon Assessment

- 61 In accordance with London Plan Policy SI12 the applicant will be expected to calculate and reduce whole life-cycle carbon emissions to fully capture the development's carbon footprint. The applicant should submit a whole life-cycle carbon assessment to the GLA as part of the Stage 1 application submission, following the Whole Life-Cycle Carbon Assessment Guidance and using the GLA's reporting template. The applicant will also be conditioned to submit a post-construction assessment to report on the development's actual WLC emissions. The assessment guidance and template are available on the GLA [website](#).

Be Seen

- 62 The applicant will be expected to monitor their development's energy performance and report on it through an online monitoring portal. The applicant should review the 'Be Seen' energy monitoring [guidance](#) to ensure that they are fully aware of the relevant requirements to comply with the 'Be Seen' policy. The applicant should provide a commitment that the development will be designed to enable post construction monitoring and that the information set out in the 'Be Seen' guidance is submitted to the GLA's portal at the appropriate reporting stages. This will be secured through suitable legal wording.

Urban greening

- 63 London Plan Policies G1 and G5 embed urban greening as a fundamental aspect of site and building design. Features such as street trees, green roofs, green walls, rain gardens, wildflower meadows, woodland, and hedgerows should all be considered for inclusion and the opportunity for ground level urban greening should be maximised. The applicant must calculate the Urban Greening Factor as set out in London Plan Policy G5 and seek to achieve the specified target prior to the Mayor's decision-making stage. A landscaping plan should also be provided.

Sustainable drainage and flood risk

- 64 The drainage strategy should aim to reduce surface water discharge from the site to greenfield rates in accordance with London Plan Policy SI 13. Where greenfield runoff rates cannot be achieved and robust justification is provided, a discharge rate of three times the greenfield rate may be acceptable.
- 65 The drainage strategy should maximise opportunities to use Sustainable Drainage System (SuDS) measure at the top of the drainage hierarchy, as set out in London Plan Policy SI 13. Roofs and new public realm areas present an opportunity to integrate SuDS such as green and blue roofs, tree pits, and permeable paving into the landscape, thereby providing amenity and water quality benefits.

Circular economy

- 66 The London Plan has introduced circular economy policies including a requirement to submit Circular Economy Statements for developments. The GLA has released draft guidance for developers on how to prepare Circular Economy Statements and a 'Design for a circular economy' Primer that helps to explain the principles and benefits of circular economy projects.

