CHAPTER 15
GREEN AND BLUE INFRASTRUCTURE

Strategic Policy O15.1

Open Space, Green Infrastructure and Nature Conservation

Access to open spaces and green infrastructure plays an important role in the physical and mental health and wellbeing of all people. We aim to ensure Merton remains an attractive and green borough, through the protection and enhancement of open spaces, green infrastructure and the natural environment. We will do this by:

a. Protecting and enhancing open spaces in the borough including Metropolitan Open Land, parks, other open spaces and areas of nature conservation to provide high quality environments for all residents;

b. Protecting and seeking improvements to walking and cycling routes to and through green spaces;

c. Enhancing existing open spaces, green corridors and the natural environment, providing habitats for biodiversity to flourish and expand;

d. Protecting and enhancing the borough's biodiversity, particularly on sites of recognised nature conservation interest, and supporting the objectives of the Mayor's Environment Strategy;

e. Increasing green infrastructure across the borough through urban greening;

f. Enhancing accessibility to our waterways, including the River Wandle and its banks, for leisure and recreational use, while protecting its biodiversity value;

g. Improving opportunities for our residents and visitors to experience nature;

h. Promoting healthy lifestyles to encourage physical education and well-being through the use of our leisure centres, schools, open spaces, playing pitches and recreational spaces; and

Justification

15.1.1. The policies in this chapter should be read alongside Chapter 8 Green infrastructure and natural environment and Policy S5 Sports and recreation facilities of the London Plan and the Infrastructure policies in Chapter 5 of this Local Plan. These policies are intended to work together to ensure that Merton's green and open spaces remain a valued asset of the borough and are protected and enhanced.

15.1.2. Merton is lucky to be one of the greenest boroughs in London, with over 1,300 hectares of open space, which makes up 35% of the borough. To ensure there continues to be good quality green spaces for everyone to enjoy, it will be important to protect and enhance the existing open spaces and green infrastructure in Merton. Emphasis will be placed on the protection and long-term management of green spaces and areas of nature conservation, and encouraging improved accessibility to these spaces. Pedestrian and cycle routes across green spaces often form a strategically important part of the borough's cycling and walking networks and many are designated as public rights of way. These routes enable active travel choices by connecting key destinations in the borough via convenient shortcuts and quiet routes away from busy roads. Pedestrian and cycle routes through green spaces should be protected and wherever possible provided to a high standard in accordance with best practice guidance.

15.1.3. The following evidence base documents have been published, which support the Local Plan and should be referenced for all relevant planning applications:

- The Merton Green Infrastructure, Biodiversity and Open Space Study (2020);
- The Merton Playing Pitch Strategy (2019); and
- The Merton Indoor Sports Facility Study (2020).

Policy O15.2

Open Space and Green Infrastructure

We place a high value on green infrastructure and open spaces, as they make a significant contribution to the health (including mental health) and wellbeing of Merton residents, contribute to social cohesion and mitigate some of the impacts of climate change. We aim to protect and enhance our open spaces and to improve accessibility to open space. We will:

a. Protect and enhance the borough's public and private open space network including protecting Metropolitan Open Land (MOL) and designated open spaces from inappropriate development in accordance with the London Plan and government guidance.

b. Ensure that in accordance with the NPPF, existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless:
   - **i.** an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or
   - **ii.** the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or
   - **iii.** the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use.

c. Ensure that development proposals within designated open spaces (which have met the conditions set in part b) above, meet all the following criteria:
   - **i.** the proposals are of a high quality design and do not harm the character, appearance or function of the open space and;
   - **ii.** the proposals retain and/or improve public access between existing public areas and open spaces through the creation of new and more direct footpath and cycle path links; and,
   - **iii.** the character and function of leisure walks are preserved or enhanced.

d. Require the creation of new publicly accessible open space as part of major development proposals in locations that are deficient in access to public open space and support the creation of new publicly accessible open space in all developments, where suitable and viable.

e. Expect development to incorporate and maintain appropriate elements of green infrastructure which makes a positive contribution to the wider network of open spaces.

f. Safeguard existing allotments, and encourage and support opportunities for community run and managed food growing spaces in new developments.

g. Expect all development to make provision for the long term management and maintenance of open space and green infrastructure on site.

Justification

15.2.1. Open space can be multi-functional; people use green and open spaces for many purposes including exercise, play, food growing, socialising and leisure. Visual accessibility is equally as important as physical access. The protection and enhancement of open spaces enables the provision of areas for active and passive leisure activities, has a positive impact on health and wellbeing, provides opportunities for social cohesion between members of Merton's diverse communities, provides safe pedestrian and cycle routes, provides areas for nature within urban areas and can provide areas for flood mitigation measures. Open spaces and green infrastructure can also play a role in enhancing and conserving the historic environment.

15.2.2. The 2020 Merton Green Infrastructure, Biodiversity and Open Space Study (referred to as Merton's Green Infrastructure Study) provides an assessment of open space quality, quantity and accessibility throughout Merton, including an audit of existing open spaces to determine the likely demand and need for facilities over the lifetime of the Local Plan.

15.2.3. The Green Infrastructure Study identifies that Merton is one of the greenest boroughs in London, with over 1,300 hectares of open space, accounting for 35% of the borough. 21% of this is public open space, slightly more than the 18% in London.

15.2.4. The coronavirus (COVID-19) pandemic has highlighted the importance of having access to green spaces within walking distance of homes. During the pandemic, visits to parks and other green spaces increased across London. It is important to protect and enhance the existing areas of open space in Merton, to ensure that as the population grows, there are good quality green spaces for everyone to enjoy.

Metropolitan Open Land

15.2.5. Metropolitan Open Land (MOL) is strategic open land that contributes to the structure of London. It is afforded the same status and protection as Green Belt land. As shown on the Policies Map, there are 9 designated areas of MOL in Merton, covering over 950 hectares, or 26% of the borough. MOL will continue to be protected from inappropriate development, in accordance with the London Plan and government guidance.

Designated open spaces

15.2.6. The open spaces relevant to this policy are designated on the Policies Map. These typically consist of parks, commons, playing fields, play areas, cemeteries and churchyards, woodlands and allotments. We are committed to ensuring the protection and enhancement of designated open space.

15.2.7. Many designated open spaces have existing buildings within them, particularly when associated with leisure and sports facilities. Proposals for new or improvements to existing buildings on open space that meet the criteria in the policy should be of high quality design, and of a scale, height and massing that is appropriate to their setting. Proposals should show how uses are required and linked to the function of the open space and all proposed uses should complement and enhance the function of the open space (e.g. pavilions and changing rooms that are required for playing pitches).

15.2.8. For clarity, the assessment that is referred to in part (b)(i) of this policy is a strategic borough-wide assessment such as the Merton Green Infrastructure Study 2020, the Merton Playing Pitch Strategy 2019, or the Merton Indoor Sports Facility Study 2020, not assessments that are done on a site by site basis.

Improving accessibility to public open space

15.2.9. The Green Infrastructure Study includes an accessibility assessment to analyse areas in the borough that are deficient in access to public open space, play areas and nature conservation, and maps are provided for each. The areas of deficiency in access to public open space are calculated by Greenspace Information for Greater London (GiGL) using their Areas of Deficiency (AoD) data model. Public open space categories are set out in the London Plan and provide a benchmark for the provision of publicly accessible open space, categorising spaces according to their size, facilities and local importance.

15.2.10. Residents in Merton experience high accessibility to Regional Parks (98%) and Metropolitan Parks (99%). There is also a good level of accessibility to District Parks (77%) and Local Parks (72%). There is a notable gap in access to District Parks indicated by a continuous band of deficiency from west to north east through Raynes Park, Wimbledon, Colliers Wood and Mitcham.

15.2.11. The best reflection of deficiency in access to open space is to the Local Parks, Small Open Spaces and Pocket Parks. In these areas of deficiency the lack of open spaces is more evident, although there is some evidence of existing open space which is not publicly accessible. There are some areas (particularly noticeable around Raynes Park) where there are gaps in access to both District and Local Parks. Major developments proposed in these areas will be required to improve access to publicly accessible open space, either through design and public realm improvements, or by providing new publicly accessible open space on site. New public access routes should be designed to be accessible by all people. Where necessary, planning obligations may be sought to secure access improvements. Applicants are advised to consult the areas of deficiency maps provided in the Green Infrastructure Study for consideration as part of the design process.

15.2.12. Where necessary, to fund any costs to the council associated with onsite provision of new open space proposed as part of major developments, commuted sums may be negotiated on a case by case basis and the level of funding sought will be commensurate to the financial burden to the council that would arise due to the open space provision.

15.2.13. A large number of open spaces in Merton are linked by rivers, brooks and smaller open spaces, or are separated from one another by short sections of built development. This can limit the accessibility to and between open spaces. New development in these areas should explore opportunities to enhance the accessibility between these spaces, in line with the principles set out in the All London Green Grid guidance and London Plan Policy SI16(F). Improvements in accessibility should be delivered in tandem with the Transport policies.

15.2.14. It is important to protect and improve the existing links between and across open spaces. These links provide important informal recreational opportunities for walking and cycling, create a safe and pleasant environment, and allow appreciation of attractive landscapes and features of historical significance.

Green infrastructure

15.2.15. Green infrastructure refers to the network of parks, rivers, water spaces and green spaces, plus the green elements of the built environment, such as street trees, green roofs and sustainable drainage systems.

15.2.16. All development will be expected to incorporate elements of green infrastructure on site, to enhance biodiversity, contribute to the health and wellbeing of all residents and help mitigate the impacts of climate change. Examples include pollinator-friendly landscaping, tree-planting, green walls, green and blue roofs and rain gardens all of which can have multiple benefits. Reference should also be made to the Local Plan Policies on Biodiversity and Nature Conservation (O15.3), Protection of Trees (O15.4) and Urban Greening (O15.5).

Allotments and Food Growing

15.2.17. Local food growing can help to create healthier food environments, improve food security, promote healthy and active lifestyles and help to improve social and community cohesion. Allotments are areas set aside for food growing and are recognised for their contribution to enabling healthy and sustainable lifestyles. These green spaces not only offer biodiversity and conservation value but also bring recreational, health and social benefits, by allowing residents to grow fresh produce.

15.2.18. The Green Infrastructure Study identifies there are 21 allotments in Merton; 19 of which are Council owned and the other 2 privately owned. It is important that allotments continue to be protected, while new spaces for growing food are also encouraged.

15.2.19. New proposed developments may provide ideal opportunities to incorporate spaces for residents to grow food. This does not have to be in formal allotment areas, but could extend to roofs, walls and balconies or by introducing trees and shrubs that produce food as part of the landscaping. It may be appropriate for areas to be used temporarily for food growing, provided it does not conflict with other policy objectives or land use priorities and does not have an unacceptable impact on the amenity of adjoining areas.

15.2.20. Food growing in schools can also help children's learning and skills, in addition to wider health and wellbeing outcomes.

Policy O15.3

Biodiversity and Access to Nature

We are committed to protecting and enhancing the natural environment. We aim to protect and enhance biodiversity, particularly on sites of recognised nature conservation interest, and to improve accessibility to nature throughout the borough. We will:

a. Protect all sites of recognised nature conservation interest against inappropriate development that will adversely affect the nature conservation value of the site, and secure measures that enhance their nature conservation value;

b. Protect and avoid damage to sites of recognised nature conservation interest, populations of protected species, priority habitats and priority species;

c. Protect Green Corridors from development which may destroy or impair the integrity of the Green Corridor.

d. Require development to contribute to net gains in biodiversity by incorporating features such as green roofs and walls, soft landscaping, bird and bat bricks and boxes, habitat restoration, tree planting and expansion and improved green links.

e. Require the following mitigation hierarchy to be followed, for development where significant harm to biodiversity is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity:
   - **i.** Avoid damaging the significant ecological features of the site
   - **ii.** Minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site
   - **iii.** Deliver off-site compensation of better biodiversity value.

f. Expect all development on sites found in an area of deficiency in access to nature to incorporate appropriate biodiversity elements and habitat features to improve nature conservation, and to improve accessibility to SINCs through site design.

Justification

15.3.1. Section 40 of the Natural Environment and Rural Communities Act 2006 places a duty on public authorities to have regard to the purpose of conserving biodiversity, through policy and decision making.

15.3.2. We are committed to protecting and enhancing biodiversity, particularly on sites of recognised nature conservation. The protection and enhancement of biodiversity in urban areas such as Merton is important, particularly in the context of biodiversity losses due to development pressure, climate change and deficiencies in access to nature. Protecting biodiversity and the wider natural environment can have a variety of significant positive impacts including strengthening wildlife movement and connections, improving health and mental wellbeing of residents, contributing to climate change adaptation and improving quality of life.

15.3.3. For clarity, reference in this policy to 'sites of recognised nature conservation interest' include all sites that are designated on the Merton Policies Map as:

- Sites of Special Scientific Interest (SSSI);
- Metropolitan, Borough or Local Sites of Importance to Nature Conservation (SINC);
- Local Nature Reserves (LNR); and
- Green Corridors.

15.3.4. Development proposals which are likely to affect sites that have been designated on the Policies Map as SSSI, SINC, LNR or Green Corridor will be required to demonstrate that such development will not adversely affect the nature conservation values of the site. Any proposals on adjoining sites will also need to ensure and demonstrate that the proposed development will not harm the nature conservation value of the designated site.

15.3.5. In line with the NPPF and London Plan Policy G6, significant harm to biodiversity on a site through proposed development should be avoided. In circumstances where harm is unavoidable, the mitigation hierarchy will be applied. It will be expected that where any mitigation or compensation is required, this will be provided at the equivalent, or better, biodiversity and habitat area and value.

15.3.6. The preservation of existing biodiversity, including wildlife habitats, is strongly preferred over re-provision as any redevelopment of an existing space will necessitate its total loss and replacement with a space that has to be established with plants and wildlife over time; this carries the risk that the replacement space will be less successful than that which it replaces.

Sites of Special Scientific Interest / Special Areas of Conservation – Wimbledon Common

15.3.7. Wimbledon Common is the only SSSI in the borough and this area is also protected by European legislation as a Special Area of Conservation (SAC). The Habitats Regulations require an 'Appropriate Assessment' to be carried out if a plan or project is likely to have a significant effect on Wimbledon Common (either alone or in combination with other plans or projects). This may apply to development projects and this is not the same as an Environmental Impact Assessment. The Natural England website has more information to help decide whether or not a development project requires an 'Appropriate Assessment'.

SINCs

15.3.8. There are 56 SINCs in Merton, covering an area of 833 hectares (22% of the borough). Proposals on, or in close proximity to SINCs should have a positive impact on biodiversity and will be assessed in accordance with London Plan Policy G6.

Local Nature Reserves

15.3.9. There are 15 LNRs in Merton; areas that have been statutorily designated under Section 21 of the National Parks and Access to the Countryside Act 1949. These are places that are considered to be important for wildlife, geology, education and enjoyment by local people. Public access to LNRs is important, provided that people visiting the site will not damage or disturb the wildlife.

Protected species, priority habitats and priority species.

15.3.10. Although Merton is a built-up area in London, it is still home to many protected species and habitats that are valuable to biodiversity. While trees and green spaces provide habitats for many species, buildings can also provide roosting sites for bats and nesting opportunities for birds. Biodiversity should be considered at the early stages of the design process, as the benefits of creating spaces for wildlife also have significant positive impacts for the health and wellbeing of local residents.

15.3.11. Wildlife in the UK is protected under the Wildlife and Countryside Act 1981 (as amended). Applicants should check that wildlife and protected species will not be affected by a proposed planning application. The Natural England standing advice on protected species should be referred to for any development proposal on a site that may impact on a protected species, priority habitat or priority species. Any development that is located within or in close proximity to a SINC or is likely to have an impact on protected species, habitats or priority species, will be required to submit an ecological survey and appraisal. This is to ensure that we can make an informed decision to protect and enhance biodiversity.

15.3.12. Ecological surveys submitted with planning applications should be in line with the Natural England standing advice on protected species and:

- be carried out by an appropriately qualified ecologist
- be carried out at an appropriate time of year and no later than 6 months prior to the submission of the planning application;
- use appropriate methods for the species and the area;
- be carried out early in the design process of a proposal;
- identify any potential impacts a proposed development is likely to have on the ecology of a site; and
- recommend suitable mitigation and enhancement measures for the proposed development.

15.3.13. Development proposals must consider the potential impact that lighting, noise or shading may have on biodiversity on and around the site. New proposed lighting should minimise impacts to biodiversity, protected species and priority habitats.

15.3.14. Any works that would affect breeding birds and their nests, such as works of demolition, vegetation removal or site clearance, will need to be done outside the nesting season from 1st of March to 31st July inclusive (in accordance with the Natural England standing advice on wild birds).

Green Corridors

15.3.15. Green Corridors are continuous areas of open space, which link other open spaces to each other, allowing animals and plants to move in and around built-up areas. There are 18 Green Corridors designated on the Policies Map, covering an area of 1,023 hectares (27% of the borough).

15.3.16. We recognise the importance of maintaining and enhancing the network of Green Corridors. These areas effectively create corridors that enable the movement of plant and animals. They allow some animals to undertake movements between different habitats that they require for survival, maintain the presence of some animals and plants in places where they would not otherwise be found, and help to ensure the maintenance of the current range and diversity of flora and fauna, and the survival of important species.

15.3.17. Proposed development on sites in and in adjacent to Green Corridors will need to consider biodiversity, wildlife and green infrastructure elements early on in the design process. This includes considering and mitigating against any potential impacts on biodiversity from elements such as lighting, noise or shading. Lighting can have negative impacts on birds, roosting bats and bats that are feeding or commuting to feeding areas.

Biodiversity Net Gain

15.3.18. Biodiversity net gain is an approach which aims to leave the natural environment in a better state than it previously was. Development proposals should maximise biodiversity benefits and ecological connectivity through ensuring that biodiversity is a key consideration early in the design process.

15.3.19. Development, particularly for new and replacement buildings and extensions to buildings, should utilise opportunities to attract new species to a site. This can include the incorporation of artificial nest boxes and bricks in buildings to provide nesting and roosting opportunities for birds, including species under threat such as swifts, house martins, swallows and house sparrows, and where appropriate, bats. Swift bricks integrated into new buildings are preferred, as these are suitable for multiple bird species. As outlined in the NPPG 2019 (para 023) these relatively small features can achieve important benefits for wildlife. Applicants will be expected to provide details of such features as part of planning applications.

15.3.20. Development proposals should prioritise the inclusion of biodiversity on-site, selecting species for planting that complements that surrounding habitats, maximises benefits to biodiversity and is beneficial to wildlife.

15.3.21. Improvements to biodiversity should not be restricted to conventional habitats but should extend to the increased use of green roofs and green walls. The use of sustainable drainage measures can also have significant biodiversity benefits – refer to Policy F15.8 and the Merton SUDs SPD for further guidance.

Areas of Deficiency in access to nature

15.3.22. There is generally good access to green spaces and nature conservation areas in Merton, however some parts of the borough are considered to be deficient in access. For clarity, areas of deficiency in access to nature are areas where people have to walk more than 1km to reach a publicly accessible metropolitan or borough SINC. These areas have been identified and mapped in the Merton Green Infrastructure Study 2020. These maps are regularly updated by GiGL and should be referred to when preparing planning applications.

15.3.23. Major development proposals on sites that are located in these areas of deficiency will be expected to alleviate these deficiencies. We will support improvements in accessibility to SINCs in areas of deficiency through all developments, where this is possible and practical.

Geodiversity

15.3.24. There are no regional or locally important geological sites in Merton. However, there is a site on Putney Heath, approximately 160 metres from the borough boundary in Wandsworth, which is a site of local importance. Development proposals that could have an impact on the geological features of this site should have regard to London Plan Policy G9.

Policy O15.4

Protection of Trees

We are committed to protecting trees and enhancing other features of the natural environment. We will:

a. Encourage and support the protection of street trees, and secure replacements utilising current technological advancements for the successful growth and establishment of trees;

b. Ensure that development proposals protect and retain trees, hedges and other landscape features of amenity value, on site and on adjoining land, wherever possible, and secure suitable replacements in instances where their loss is justified;

c. Expect development proposals, where appropriate, to plant additional trees on site in a coordinated way to maximise the green infrastructure network and to increase the borough's tree canopy;

d. Use Tree Preservation Orders to safeguard significant trees of amenity value;

e. Only permit development if it will not damage or destroy any tree which:
   i. is protected by a Tree Preservation Order;
   ii. is within a conservation area; or,
   iii. has significant amenity value.

   However, development may be permitted when:

   iv. The removal of the tree is necessary in the interest of good arboricultural practice; or
   v. The benefits of the development outweigh the tree's amenity value.

   In circumstances where e) iv. or v. applies, suitable high-quality re-provision of equal value must be provided on site. Where on site provision is demonstrably not possible, as agreed with the council, a financial contribution of the full cost of appropriate re-provision will be required.

f. Expect proposals for new and replacement trees, hedges and landscape features to consist of appropriate native species to the UK.

g. Require developers to ensure that bio-security measures are adhered to for trees, shrubs and herbaceous plants to prevent accidental release of pests and diseases.

Justification

15.4.1. Trees, hedges, shrubs and other significant vegetation make an important contribution to the borough's townscape and the quality of life for residents. These elements provide visual and amenity enhancements to the built environment, while also providing much needed habitats for biodiversity. Trees, and in particular mature trees, can help to reduce impacts on air quality and contribute to climate change by capturing and storing carbon dioxide. Trees will continue to play a significant role in adapting to climate change by having a positive impact on reducing flood risk and helping to reduce the urban heat island effect.

15.4.2. Merton's Green Infrastructure Study 2020 identifies that although Merton has an overall tree canopy cover that is greater than the London average, a sustained expansion of tree and woodland planting is important. This is needed to address ongoing biodiversity declines, increase resilience to pests and diseases, increase shade and tackle climate change. The Study identifies the total tree canopy, including in private gardens, covers an area of 1,040 hectares, approximately 28% of the borough. There are different techniques for estimating tree and woodland coverage, but of the total tree canopy: 266.1 hectares (26%) consists of woodlands contained within parks and public open spaces; 15.2 hectares (1.5%) consists of individual woodlands; 116.7 hectares (11.2%) consists of street tree (canopy); and the remainder (61.3%) is found in private gardens, cemeteries and institutional grounds. London's tree coverage is estimated to be 20% and the London Environment Strategy has set a target to increase this by 10% by 2050.

15.4.3. We are supportive of the protection and retention of trees on development sites, as this will help to provide a platform to expand the borough's tree canopy. When considering the amenity value of a tree, we will look at Category A, B and lesser category trees where they are considered to be of importance to amenity and biodiversity, as defined by BS 5837:2012 (in accordance with the London Plan G7C).

15.4.4. There will be an expectation for proposals to also provide new trees on site, to help add to the borough's tree canopy. While it is recognised that individual site constraints may mean this is not possible on every site, applicants will be expected to demonstrate they have considered the provision of new trees as part of their design concepts.

15.4.5. We will use the existing planning mechanisms including Tree Preservation Orders and Conservation Area designations to protect existing trees on private land.

15.4.6. In line with the NPPF and London Plan Policy G7, ancient woodland areas and veteran trees should be protected from development. These are irreplaceable habitats and form a key component of green infrastructure, helping to create resilient and sustainable places

to live. Any proposed development in the vicinity of these protected areas should seek guidance prior to submitting a planning application. Further guidance on the protection of ancient woodland and veteran trees can be accessed via the Forestry Commission or The Woodland Trust.

15.4.7. We consider it important that development proposals are accompanied by appropriate reports and surveys to deal with the impact of the proposals on the existing vegetation. We assess trees within the scope of BS 5837:2012. When applicable, developers will need to demonstrate that they have paid regard to current British Standards such as, *BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations*', *BS 3998:2010 ' Tree Work – Recommendations'* and other relevant documentation such as the Arboricultural Advisory and Information Service's 'Arboricultural Practice Note 12'.

15.4.8. New development should be designed positively to integrate existing trees. For trees that are located on a proposed development site, the appropriate arboricultural information should be provided to demonstrate that layouts have been informed by the use of such survey and tree constraints mapping information. If a tree is proposed to be removed, applicants will be expected to show that they have considered alternative design layouts and provide reasons why these layouts were not brought forward.

15.4.9. Tree planting should be considered from the design stage of a proposal. The location of new trees should be planned to complement proposed features, have an appropriately sized tree pit, be bio-secure and be appropriate for the intended use, of the development. We may request details relating to the planned maintenance for new trees and landscaping on development sites, to ensure planting becomes established, particularly within the first five years. Planning conditions will also be used, as appropriate.

15.4.10. All developments are required to minimise impacts on existing trees, hedges, shrubs and other significant vegetation, and provide sufficient space for the crowns and root systems of existing and proposed trees and their future growth. Developments within proximity of existing trees are required to provide protection from any damage during development.

15.4.11. In those exceptional circumstances where the loss of or damage to trees of value is unavoidable, mitigation through adequate planting will be secured. As set out in London Plan G7C, recognised valuation systems should be used to inform suitable replacement planting based on the existing value of the benefits of the trees removed. Examples of such valuation systems include i-tree and CAVAT. We will require applicants to provide this information as part of the arboricultural report submitted with the planning application.

15.4.12. Planning conditions will be used for any development proposals where a replacement tree is required. Section 106 planning agreements may also be used, in circumstances where a payment in lieu is required.

15.4.13. Where there are constraints to planting and re-planting cannot occur on-site, or only partial canopy cover can be re-provided, the development will be required to provide evidence to justify why it is not feasible. Once this is established to our satisfaction, it may then be accepted that off-site compensation is appropriate, or that a financial contribution of the full cost of appropriate re-provision is required. The preference will be to prioritise planting over a financial contribution, unless there are exceptional circumstances in relation to compliance with other policy requirements.

15.4.14. Underground servicing often affects existing trees and/or can limit where new trees are located. Proposals involving existing and/or proposed underground servicing must ensure that the requirements for protecting existing trees and proposing new trees are fully considered.

15.4.15. Although exotic species can have interesting aesthetic qualities, they can also have a damaging impact on biodiversity and the local ecology. We have a strong preference for native species to be planted but, where appropriate, will consider suitable exotic species. Species selection should also be appropriate for the site location and local conditions, taking into account a changing climate. Fruit trees will be supported, as these can provide a variety of benefits.

15.4.16. We will take appropriate measures to prevent or reduce the risk of transmission of emerging pests, diseases and invasive species that are detrimental to the health of trees. With the advent of introduced pests, such as the Oak Processionary Moth (Thaumeotopoea processionea) and diseases such as Ash Dieback (Chalara fraxinea), trees, shrubs and herbaceous plants should follow BS8545: Trees: From Nursery to independence in the Landscape. This includes that trees should not be imported directly from European suppliers and planted straight into the landscape setting but spend a full growing season in a British nursery to ensure plant health and non-infection by foreign pests and diseases before being introduced into a development. Landscape conditions will be used to ensure that good practice is exercised as detailed by LTOA and the Forestry Commission.

Policy O15.5

Urban Greening

We are committed to ensuring that new development incorporates green infrastructure, to help create healthier places, enhance biodiversity and address the urban heat island effect. We will:

a. Require major developments to incorporate urban greening through site and building design, by:

   i. Conducting an Urban Greening Factor (UGF) assessment in accordance with the methodology set out in the London Plan;
   ii. Achieving an UGF of 0.4 for developments that are predominantly residential;
   iii. Achieving an UGF of 0.3 for developments that are predominantly commercial.

b. Require all developments to consider green infrastructure at an early stage of the design process and incorporate this as part of an integrated design approach.

c. Strongly encourage the inclusion of urban greening for all other development in Merton.

Justification

15.5.1. Urban greening describes the incorporation of green infrastructure elements into a development, such as vegetation, trees, green roofs, green walls, hedgerows and water features. There can be multiple benefits to including these features in new development including improved physical and mental wellbeing, biodiversity and habitat enhancements, improved air quality, water attenuation, carbon storage, improved visual amenity and helping to address the urban heat island effect.

15.5.2. London Plan Policy G5 includes a London wide UGF model to assist boroughs and developers in determining the appropriate provision of urban greening for new developments. We will use the London wide model in the determination of planning applications but may in time develop a local model through further GLA and local supplementary guidance.

15.5.3. The Merton Green Infrastructure Study 2020 includes a technical report which assesses the quantity and quality of green and blue infrastructure throughout Merton. The report identifies that there are only a small number of green roofs in Merton representing less than 0.1% of all green and blue infrastructure. This policy will help to ensure that higher levels of green infrastructure are provided on development sites through the use of urban greening features such as green roofs and walls, helping to enhance biodiversity and create healthier places.

15.5.4. Merton Council declared a Climate Emergency in July 2019 and is working towards the implementation of a Climate Action Plan that will set out the strategic approach to reducing carbon emissions in the borough. One of the key action areas identified to help the borough become carbon neutral is enabling green space across Merton to capture carbon from the atmosphere. By ensuring that new developments incorporate urban greening, green infrastructure will improve across the borough and help to mitigate the impacts of climate change such as overheating, flooding and loss of biodiversity.

15.5.5. As set out in the Climate Change policies in this plan, development proposals will be required to demonstrate they are well designed, fully adaptable and resilient to the impacts of a changing climate. Urban greening should be incorporated into the design of new development to assist in mitigating the risk of overheating and adverse impacts on the urban heat island effect.

15.5.6. All applicants will be expected to consider green infrastructure at the earliest possible stage of the design process and take every opportunity to incorporate urban greening elements into their development. This should be clearly shown through the Pre-Application process.

15.5.7. Applicants will be required to provide the following information:

- Appropriate information which provides sufficient detail on the type(s) of green infrastructure proposed;
- Justification indicating why the type(s) of green infrastructure have been proposed for the development;
- The UGF calculation and score; and
- Appropriate information on how the urban greening elements will be maintained and managed over the lifetime of the development.

15.5.8. Urban greening is not only relevant for major development sites. Given that a large proportion of development that will come forward over the Local Plan period will be on small sites, it will be important that these sites also contribute to the provision of additional green infrastructure in the borough. Planning applications submitted for small sites will be strongly encouraged to incorporate urban greening on site as part of a development. While there are many ways this can be done, three examples include creating greener front gardens, using capillary matting instead of hard standing for car parking areas and increasing the overall amount of vegetation on site. Further information is provided in Merton Council's Small Sites Toolkit SPD 2021

Policy O15.6

Wandle Valley Regional Park

We are committed to protecting the Wandle Valley Regional Park and maintaining it as a strategic, biodiverse and accessible corridor through the borough. We will:

a. Support the Wandle Valley Regional Park as one of London's major green networks, protecting biodiversity and supporting opportunities for formal and informal recreation through enhanced accessibility.

b. Protect and enhance the River Wandle, including its green and blue infrastructure, biodiversity and wildlife corridors.

c. Support opportunities for green infrastructure improvements to the Wandle Valley Regional Park and along the River Wandle.

d. Support the completion of the Wandle Trail.

e. Require development within 400m of the Wandle Valley Regional Park boundary to consider its relationship to the park in terms of visual, physical and landscape links, and ensure that new development positively enhances accessibility to the park through improvements to walking and cycling.

f. Expect all new development within 400m of the Wandle Valley Regional Park to provide green infrastructure elements on site through urban greening.

g. Work with the Environment Agency, Thames Water, the Greater London Authority, landowners and developers to implement flood risk reduction measures which include green infrastructure, that manage river and surface water flooding while delivering wider benefits for water and air quality, people and wildlife.

h. Encourage the celebration of the Wandle Valley Regional Park through community celebrations, arts, cultural events and sporting activities that will support and promote tourism and recreation in Merton.

i. Work with neighbouring boroughs and relevant bodies to support and encourage increased accessibility through the Wandle Valley Regional Park.

Justification

15.6.1. The Wandle Valley Regional Park is made up of a number of sites that run along or nearby to the River Wandle. These spaces, particularly the Wandle Trail, are especially important for the quality of life of residents in Merton, positively contributing to their health and wellbeing.

15.6.2. For the purposes of this document, the Wandle Valley Regional Park is taken to mean the areas of land in the borough which correspond to the area defined in the All London Green Grid Wandle Area Framework, as shown on the Policies Map.

15.6.3. The Wandle Valley Regional Park Trust was established in 2012 to provide leadership and coordination of a sub-regional partnership to improve the effectiveness, coherence, resilience and quality of the Wandle Valley Regional Park. The 2016-2021 Strategy identifies the Wandle Valley Regional Park as a strategically important asset for London. The Trust supports the promotion of the park not just as a collection of green spaces, but as an interconnected system that can benefit communities living and working in the wider Wandle Valley area.

Green infrastructure and biodiversity functions

15.6.4. The Wandle Valley Regional Park is one of the largest strategic green links in south west London. Rather than a single area of open land, the park is made up of a green grid of connected spaces with visual or physical links to the current or historic route of the River Wandle.

15.6.5. The Wandle Valley Regional Park enables improved access to a linked network of open spaces, including parkland, wildlife areas, riverside walks and facilities for children and young people, which increases the quality of the environment and contribute to the identity of the valley as a place to live, work and visit.

15.6.6. The River Wandle forms part of London’s network of waterways, also known as the Blue Ribbon Network in the London Plan. It is an important green corridor for species movement throughout south west London with a number of protected species found along its length. Biodiversity and wildlife should be protected and enhanced along the waterways. In line with the other green infrastructure policies, applicants will be expected to demonstrate that proposed development will not have a significant adverse effect on protected or priority species and habitats.

15.6.7. For development within 400m of the Wandle Valley Regional Park, an increase in green cover through the provision of elements such as high-quality landscaping, trees, green roofs, green walls and nature based sustainable drainage will help to strengthen the Wandle Valley Regional Park as a network of green and open spaces, while also enhancing biodiversity.

Accessibility

15.6.8. The Wandle Valley Regional Park is a place for healthy living, enhancing physical and mental health by improving access to good quality public realm and green spaces.

15.6.9. The Wandle Trail is an established footpath and cycle way, providing a 12 mile (20 km) strategic green route that offers the enjoyment of a variety of chalk stream heritage, flora and fauna. Predominantly following the River Wandle, the trail runs between East Croydon station to the Thames Path in Wandsworth, crossing through Merton with a section of the trail in the north of the borough forming part of the national cycle network route 20. The Wandle Trail links key destinations in the borough and beyond, via convenient shortcuts and quiet routes away from busy roads. It forms a strategically important part of the borough's cycling and walking network that plays a vital role in enabling active travel choices.

15.6.10. While most sections are in a good condition, there are some missing links and areas that will require future investment and improvement to enable a continuous trail that is fully accessible to all users, at all times of the year. We support the completion of the Wandle Trail, including the identified improvements in access required in the north east of the borough, near Earlsfield. This will complete a missing link, and provide a safer, quieter and more pleasant alternative route for cyclists and pedestrians to the busy Durnsford Road bridge. Any improvements here would need to be agreed with the neighbouring borough of Wandsworth. Investment in the Wandle Trail should respect the character of the river's environs and be designed for pedestrian and cycle access.

15.6.11. The Wandle Trail is an established footpath and cycle way, providing a 12 mile (20 km) strategic green route that offers the enjoyment of a variety of chalk stream heritage, flora and fauna. Predominantly following the River Wandle, the trail runs between East Croydon station to the Thames Path in Wandsworth, crossing through Merton.

15.6.12. While most sections are in a good condition, there are some missing links and areas that will require future investment to enable a continuous trail. We support the completion of the Wandle Trail, including the identified improvements in access required in the north east of the borough, near Earlsfield. Any improvements here would need to be agreed with the neighbouring borough of Wandsworth. Investment in the Wandle Trail should

respect the character of the river's environs and be designed for pedestrian and cycle access.

15.6.13. Improvements to wayfinding and signage along the Wandle Trail and throughout the Wandle Valley Regional Park are welcomed, as these will help to increase accessibility and encourage more residents and tourists to visit. Access points and trails should be inclusive and provide access for all.

15.6.14. Proposed development along the Wandle Trail and within the Wandle Valley Regional Park should seek to enhance accessibility for pedestrians and cyclists through providing safe, welcoming and inclusive environments that will encourage active transport.

15.6.15. There are also future opportunities for the Wandle Valley Regional Park to incorporate a large area of open space stretching from Mitcham Common and Three Kings Piece to Beddington, in the neighbouring borough of Sutton. We will continue to work with the relevant bodies to support the expansion of this green space and enable access to and from the borough.

Development within 400m of the Wandle Valley Regional Park

15.6.16. The Wandle Valley Regional Park is a significant blue and green corridor that offers a range of visual, physical and health benefits to residents and visitors.

15.6.17. All applications for development within 400m of the Wandle Valley Regional Park, as identified on the Policies Map, will be required to show how the visual, physical and landscape links to the park have been considered for the design of the development. This should include details in the Design and Access Statement showing how the relationship between the proposed development and the Wandle Valley Regional Park has been considered in the design of the built form and access to the site. This is to ensure access to the Wandle Valley Regional Park is protected and enhanced, promoting sustainable travel options and healthier lifestyles.

15.6.18. Our aspiration is for new development to complement the existing green corridors. As outlined in our transport policies, development proposals should enhance or enable new walking and cycling connections and networks to the Wandle Valley Regional Park, including the Wandle Trail. Physical barriers such as railings and built form that disrupts continuity and access into and around the park should be removed through the design of new development.

15.6.19. Proposals that restrict or block off existing access to the Wandle Valley Regional Park will not be supported unless it can be demonstrated that alternative and better quality access will be provided.

Recreation and cultural functions

15.6.20. The areas that make up the Wandle Valley Regional Park are key cultural and recreational attractions for the borough, as well as being vital green and blue assets delivering a wide range of benefits. The vibrant mix of leisure and recreation opportunities, such as Morden Hall Park, Deen City Farm and Watermeads Nature Reserve attracts both local residents and visitors. These attractions are significant for the borough as they help to promote tourism and celebrate the cultural features of the area.

15.6.21. Tourism and recreation activities throughout the Wandle Valley Regional Park are encouraged, particularly where activities can promote active and healthy lifestyles.

15.6.22. Proposals should make use of, and improve access to, existing cycling and pedestrian routes in the Wandle Valley Regional Park and encourage sustainable commuting patterns for tourism and recreation activities.

Other

15.6.23. There are a number of overhead network power cables within the area surrounding the Wandle Valley Regional Park which include 20 pylons on the Beddington to Wimbledon overhead. We will support the relocation of existing power lines, pylons and other visually intrusive servicing as part of planning agreements in relation to new developments where it is technically, practically, environmentally and economically viable. This will be dependent on agreements being made between landowners and the relevant infrastructure providers.

Strategic Policy F15.7

Flood Risk Management and Sustainable Drainage

As a Lead Local Flood Authority, we will work in partnership with the Environment Agency, water companies, developers, neighbouring boroughs and local communities to manage and reduce flood risk from all sources. We will:

a. Steer development towards areas at lowest risk of flooding from all sources through the application of the sequential test, as set out in the National Planning Policy Framework (NPPF) and supporting national Planning Practice Guidance; assess the cumulative impact of development and land use change; and make strategic planning decisions using the most up-to-date flood risk data and information from Merton Council, the Environment Agency, other Risk Management Authorities (RMAs) and the National Flood and Costal Erosion Risk Management Strategy for England (2020).

b. Implement the recommendations and objectives of Merton's flood risk management plans, such as the Strategic Flood Risk Assessment (SFRA), Local Flood Risk Management Strategy and other RMAs' flood risk management plans.

c. Require all developments to incorporate flood resilience measures and be adaptable to the future impacts of climate change.

d. Ensure all major development includes water efficiency measures such as rainwater harvesting or grey water recycling to minimise water consumption, and SUDS (Sustainable Drainage Systems) to deliver multi-functional benefits such as managing surface water runoff, improving biodiversity, and providing amenity and water quality benefits.

e. Deliver wastewater infrastructure improvements across the borough in partnership with water companies to help develop and implement their Drainage and Wastewater Management Plans (DWMPs).

f. Reduce the risk of flooding (from all sources) in an integrated way through coordination with the following local plan policies; –Open Space and Green Infrastructure; Urban Greening;, Managing Local Flooding; Sustainable Drainage Systems; Placemaking and Design.

Justification

15.7.1. Management of flood risk within Merton will be undertaken in line with the National Planning Policy Framework (NPPF), Flood and Water Management Act 2010, Flood Risk Regulations 2009 and the European Water Framework Directive 2000 transposed into law through the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003.

15.7.2. Merton Council has statutory duties and responsibilities, set out under the Flood and Water Management Act 2010. As Lead Local Flood Authority, Merton Council is responsible for managing local flood risk, including flooding from surface run-off, ordinary watercourses and groundwater. The Environment Agency is responsible for main rivers (including the River Wandle, The River Graveney and the Beverley and Pyl Brooks in Merton). Thames Water are responsible for wastewater sewerage, including flooding arising from public sewers. Sutton and East Surrey Water and Thames Water are responsible for clean water supply in the borough. The sources and mechanisms of flooding are often interlinked, and we will continue to work in partnership with all RMAs and local interested groups, such as the South East Rivers Trust and neighbourhood groups to manage the risk of flooding.

15.7.3. We have updated the Strategic Flood Risk Assessment (SFRA) in partnership with LB Wandsworth and the Environment Agency. The SFRA takes consideration of the updated national climate change allowances. The Level 1 SFRA provides an overview of flood risk issues in Merton from all sources. The Level 2 SFRA assesses the risk to specific site allocations where development is proposed in areas at risk from flooding. The Level 2 SFRA provides sufficient information to allow the application of part b) of the NPPF Exception Test.

15.7.4. Information and guidance on how to carry out a Sequential Test and Exception Test and what must be addressed within a development's Flood Risk Assessment can be found in Merton's online SFRA GIS map. Further guidance can also be found in the Environment Agency's current advice on Flood Risk Assessment, NPPF and the National Planning Practice Guidance, all of which are available online. Pre-application discussions with the Environment Agency and/or Merton Council are strongly recommended to confirm both the requirements for flood risk management, any mitigation which may be required and to ensure sustainable drainage is incorporated appropriately and accordance with Policy F13.10 Sustainable Drainage Systems.

15.7.5. Merton's Local Flood Risk Management Strategy identifies Merton's objectives and measures for how we will manage local flood risk, (defined as flooding from surface water, groundwater and ordinary watercourses) and it includes specific requirements with

regards to management of flood risk to and from development. Developers should ensure that development proposals meet the objectives and requirements identified in the Local Flood Risk Management Strategy.

15.7.6. Flood events are expected to become more frequent and more significant in the future as the U.K.'s climate changes and this requirement will go some way to adapting to this change. The installation of sustainable drainage measures, such as green roofs, raingardens and swales can deliver multi-functional benefits: increasing biodiversity and urban cooling, enhance open space in built-up areas and improvements to water quality. Merton's SUDS SPD provides further guidance on designing and implementing SUDS in development and addresses how Merton, as the LLFA, will review and evaluate third party drainage proposals on developments.

15.7.7. SUDs will be implemented in all developments. The requirement to utilise SUDS including those in low-risk areas, is because surface water from one area of a catchment may contribute towards enhanced flood risk in another area of that catchment.

Policy F15.8

Managing Local Flooding

a. Developments must incorporate the latest climate change allowances as part of the Flood Risk Assessment (FRA) and/or Surface Water Drainage Strategy.

b. Where development is proposed in the Environment Agency's Groundwater Source Protection Zones 1 or 2, measures must be taken to ensure the protection of groundwater supplies.

c. Developments must demonstrate that the local water supply and public sewerage networks have adequate capacity both on and off-site to serve the development. Where there is limited or no capacity identified through known flood incidents or predicted flood risk, on-site improvements must be programmed/planned.

d. We will expect to see a sequential approach applied to the site layout, locating the most vulnerable elements of a proposed development within areas at lowest risk of flooding. All buildings should be set back from the top of the banks by at least 8m for main rivers and 5m for ordinary watercourses. This is to allow for future improvements and maintenance of land drainage and flood defences, improve the ecological functioning of river corridors and enhance local amenity.

e. In Flood Zones 2 and 3 or on sites shown to be at high risk of surface water flooding and for all proposals for sites of 10 dwellings or more or 1000sqm of non-residential development or more, or on any other proposal where safe access/egress cannot be achieved in accordance with the SFRA, a Flood Emergency Plan must be submitted.

f. Permit appropriate development in Flood Zones 1, 2, 3a and 3b subject to meeting the criteria in the following table:

Flood zones: Land uses and developments restrictions	Sequential Test	Exception Test	FRA and Drainage Strategy
Flood Zone 3b: Functional floodplain The functional floodplain will be protected by not permitting any form of development on undeveloped sites unless it is: • Water Compatible development. • Essential utility infrastructure In these cases, essential infrastructure that has passed the Exception Test, and water	Required for essential infrastructure.	Required for essential infrastructure.	An FRA is needed for all developments. A Drainage Strategy is needed for all new dwellings and major developments.

Flood zones: Land uses and developments restrictions	Sequential Test	Exception Test	FRA and Drainage Strategy
compatible uses should be designed and constructed to remain operational and safe for users in times of flood; result in no net loss of floodplain storage; not impede water flows and not increase flood risk elsewhere. Redevelopment of existing developed sites will only be supported if there is no intensification of the land use, no increase in building footprint, number of units or bedrooms and a net flood risk reduction is proposed. Restoration of the functional floodplain will be supported. Proposals for the change of use or conversion to a use with a higher vulnerability classification will not be allowed.			
Flood Zone 3a: High Risk Essential Infrastructure and More Vulnerable development may be permitted where the Exception Test is satisfied. Water Compatible and Less Vulnerable land uses are permitted. Highly Vulnerable developments will not be allowed. Self-contained residential basements and bedrooms at basement level will not be allowed.	Required for all developments unless exceptions outlined in the justification applies.	Required for Essential Infrastructure and More Vulnerable development.	A Drainage Strategy is needed for all new dwellings and major developments. An FRA is required for all development proposals.
Flood Zone 2: No land use restrictions Self-contained residential units at basement level and bedrooms at basement level will not be allowed by the Council without right mitigation measures in line with Environment Agency Guidance and Merton Local Plan policy.	Required for all developments unless exceptions outlined in the justification applies.	Required for Highly Vulnerable development.	A Drainage Strategy is needed for all new dwellings and major developments. An FRA is needed for all development proposals.

Flood zones: Land uses and developments restrictions	Sequential Test	Exception Test	FRA and Drainage Strategy
Flood Zone 1 No land use restrictions.	N/A	N/A	A Drainage Strategy is needed for all new dwellings and major developments. In line with Merton's Strategic Flood Risk Assessment (SFRA) and the Planning Practice Guidance, an FRA is needed for development sites which are: • more than 1 hectare (ha) • less than 1 ha, including a change of use in development type to a more vulnerable class (for example from commercial to residential), where it could be affected by sources of flooding other than rivers (for example surface water, groundwater and sewer flooding) as identified in the Merton Council SFRA • in an area which has critical drainage problems

g. Where a Flood Risk Assessment (FRA) is required, it must:
   i. Conform with national policy and guidance, as well as the BSI (British Standards Institution) Code of Practice on Assessing and managing flood risk in development (BS 8533:2017).

Merton Council and/or Environment Agency may need addition research or information depending on the type of development and location to be included in the FRA.

ii. Be submitted with the planning application.

iii. Provide evidence of the application of the Sequential Test and where required, the Exception Test.

iv. Take account of the advice and recommendations within the Merton's Strategic Flood Risk Assessment, Local Flood Risk Management Strategy and Surface Water Management Plan.

h. Planning conditions or planning obligations may be used where appropriate to secure flood risk mitigation and sustainable drainage measure to mitigate flooding from different flood sources within development proposals.

Basements and subterranean developments

i. Basements within flood affected areas of the borough represent a particularly high risk to life, as they may be subject to very rapid inundation. Applicants will have to demonstrate that their proposal meets the following requirements:

Flood Zone	Details
Flood Zone 3b Functional Floodplain	Basements, basement extensions, conversions of basements to a higher vulnerability classification or self-contained units will not be allowed.
Flood Zone 3	**New basements:** • Less Vulnerable / Water Compatible uses are permitted. • More Vulnerable uses will only be considered if an FRA shows that the risk to life can be managed. Bedrooms at basement levels will not be allowed. • Highly Vulnerable uses, such as self-contained basements/bedrooms use will not be allowed. **Existing basements:** • No basement extensions, conversions, or additions for Highly Vulnerable uses. • More Vulnerable uses will only be considered if an FRA demonstrates that the risk to life can be managed.
Flood Zone 2	**New Basements**: if the Exception Test (where applicable) is passed, basements may be allowed for residential use where they are not self-contained or used for bedrooms. **Existing Basements**: basement extensions, conversions or additions may be allowed for existing developments where they are not self-contained or used for bedrooms.

Flood Zone	Details
	If a basement, basement extension or conversion is acceptable in principle in terms of its location, it must have internal access to a higher floor and flood resistant and resilient design techniques must be adopted.
Flood Zone 1	No restrictions on new basements or extensions to existing basements, providing they are accompanied with the necessary assessments.

Justification

15.8.1. The protection of people, properties, and infrastructure from the risk of flooding from all sources is of immense importance. The flood risk and sustainable drainage systems policies are supported by Merton's Strategic Flood Risk Assessment (SFRA), Local Flood Risk Management Strategy (LFRMS) and Surface Water Management Plan (SWMP).

15.8.2. Merton is affected by several sources of flood risk, primarily surface water flooding which has been the cause of recent flood events in the borough in the summer storms of 2017, 2016 and most significantly in 2007. The borough is also affected by flooding from rivers, ordinary watercourses, sewers, reservoirs and groundwater flooding. The Level 1 SFRA gives an overview of flooding from all sources across the borough.

15.8.3. The Environment Agency's Risk of Flooding from Surface Water mapping, alongside Merton's SFRA, LFRMS and SWMP and historical flooding records of the borough, show that several areas including Colliers Wood, West Barnes and Raynes Park and Summerstown are affected by multiple flood risk sources.

15.8.4. We hold practical information on our website, including a SFRA online map where users can: find out if they are at risk of flooding, get help during a flood, report flooding, and find out more about how we are managing local flood risk.

15.8.5. To create job opportunities, deliver homes and essential infrastructure, meet the demands of predicted population growth, enable future economic growth and secure improvements in areas such as Colliers Wood and other sites within the Wandle Valley, it will be necessary to develop on sites within areas at medium to high risk of flooding, subject to meeting the requirements of the Sequential and Exception Tests as set out in the NPPF.

Flood Risk Assessments (FRAs)

15.8.6. Flood Risk Assessments (FRAs) will be needed in line with national policy and guidance, as well as the BSI (British Standards Institution) Code of Practice on Assessing and managing flood risk in development (BS 8533:2017). This code provides detailed information on the requirements for assessing and managing flood risk in development and how to produce site-specific FRAs.

15.8.7. Developers should agree the scope of the FRA in consultation with the council in their role and the LPA and LLFA from the earliest stages of project planning and design to ensure that appropriate flood risk management measures are included as part of the design and layout. Developers should refer to the EA's guidelines on 'Flood Risk Assessment for Planning Applications' or the EA's 'Standing Advice on Flood Risk Assessment' in cases where an FRA is not needed, including for householder

applications and minor non-residential extensions. We will consult the EA on all proposals accompanied by an FRA or for any proposal within 20m of a main river or culverting operation.

15.8.8. FRAs should assess the risk of flooding in the future as a result of the impact of climate change on river flows and rainfall patterns, taking account of the latest climate change allowances. This will help minimise vulnerability and provide resilience to flooding in the future. FRAs should set out the proposed measures to manage flood risk over the lifetime of the development, including measures to steer development away from areas considered to be at high risk of flooding from all sources, applying appropriate site and building design (Policy 12.1), incorporating Sustainable Drainage Systems (Policy F15.9), maintaining and enhancing the borough's green and blue infrastructure (Policy O15.2) and contributing to urban greening (Policy O15.6).

15.8.9. FRAs must address the management of surface run-off, the extent of impermeable surfaces resulting from the development, and the potential for increased flood risk both on-site and elsewhere within the catchment.

15.8.10. In addition to fluvial flooding, properties and infrastructure within the Merton are also at high risk of flooding from other, more localised sources, such as surface / groundwater / sewer flooding due to surcharging of sewers and drains or due to the failure of infrastructure. Flooding can also occur away from the fluvial floodplain because of development where on-site/off-site infrastructure is not in place ahead of development. Therefore, an FRA is also needed for smaller development proposals in Flood Zone 1, where there is evidence of a risk from other sources of flooding identified in the SFRA.

Sequential Test and Exception Test

15.8.11. Future development in Flood Zones 3a and 2 will only be considered if the 'Sequential Test' has been applied following national policy and guidance. However, there will be some exceptions to this. The Sequential Test will not be needed if, it is not a major development and at least one of the following applies:

- It is a Local Plan proposal site that has already been sequentially tested, unless the use of the site being proposed is not per the allocations in the Local Plan.
- It is within a main centre boundary as identified within this Local Plan (Wimbledon and Morden town centres).
- Redevelopment of an existing single residential property.
- Conversions and change of use.

15.8.12. The Sequential Test will be needed in all other cases.

15.8.13. If, following the application of the sequential test, it is not possible, consistent with wider sustainability objectives (environmental, social and economic) for development to be in a flood zone with a lower probability of flooding, the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in national planning guidance.

Water infrastructure

15.8.14. We will look to ensure that there is adequate water supply, surface water, foul drainage and sewerage treatment capacity to serve all new developments. Developers will need to show that there is adequate capacity both on and off-site to serve the development and that it would not lead to problems for existing users. In some circumstances this may make it necessary for developers to carry out studies to learn the effect proposed development will have on the existing infrastructure. Overloading of the system will not be allowed.

15.8.15. Where there is a capacity problem the developer will need to fund improvements to be completed prior to completion of the development. An exception to this is where the water company has improvement works programmed in that fits with the completion time of the development.

Basement and subterranean Supplementary Planning Document (SPD)

15.8.16. Basement and subterranean applications must ensure they are safe from flooding and do not increase risk to and from the site. We will only allow basements and other underground/subterranean development where:

- it can be proven it will not cause harm to the built and natural environment and local amenity including the local water environment, ground conditions and biodiversity.
- the basement itself will be protected from flooding.
- positively pumped devices are installed to protect basements from the risk of sewer flooding.

15.8.17. Basement developments require the submission of more information in the form of a Basement Impact Assessment (BIA), Construction Method Statement (CMS) and Site-Specific Ground Investigation to provide us with a basis for deciding planning

applications. Merton's Basement and Subterranean Development SPD provides guidance and sets out what needs to be demonstrated as part of an assessment.

Policy F15.9

Sustainable Drainage Systems (SUDS)

All major development must include water efficiency measures, to minimise water consumption such as rainwater harvesting or grey water recycling, as well as Sustainable Drainage Systems (SUDS) to reduce surface water runoff to greenfield rates, and provide biodiversity, urban greening, amenity and water quality benefits.

Details should be supplied which address the maintenance requirements of the drainage systems for the lifetime of the development which they serve.

We will require all developments to reduce the risk of flooding by:

a. Seeking mitigating measures against the impact of flooding from all sources and ensure all new development including all basement and subterranean development implement appropriate SUDS and show sustainable approaches to the management of surface water in line with the Non-Statutory Technical Standards for SUDS.

b. Ensuring developers prove the maintenance and long-term management of SUDS through a SUDS Management Plan submitted as part of the planning process.

c. Requiring developers to incorporate soft landscaping, appropriate planting (including trees) and permeable surfaces into all new developments including non-residential developments, in line with Policy O15.7 *Urban Greening*.

d. Requiring the retention of soft landscaping and permeable surfaces in existing gardens. For example, all new driveways or parking areas associated with development should be made of permeable materials in line with permitted development rights.

e. Ensuring any development or re-development that effects a heritage asset or its setting (including conservation areas) must consider Sustainable Drainage Systems (SUDS) and demonstrate within a Heritage Statement the approach taken to ensure that there is no adverse impact on the character and appearance of the asset and that there is no long-term deterioration to the building's fabric.

f. Reducing surface water discharge to greenfield runoff rates.

g. Using conditions or planning obligations to secure flood risk mitigation and sustainable drainage measures.

Justification

Surface water and sewer flooding

15.9.1. The borough is very susceptible to surface water flooding. Surface water flooding happens when the ground and rivers cannot absorb heavy rainfall and when manufactured drainage systems have insufficient capacity to deal with the volume of rainfall. Typically, this type of flooding is localised and happens very quickly, making it exceedingly difficult to predict and give warnings. With climate change predicting more frequent short-duration, high intensity rainfall and more frequent periods of long-duration rainfall, coupled with an ageing Victorian sewer system and increasing pressure from growing populations, surface water flooding is likely to be an increasing problem.

15.9.2. Thames Water has modelled the impact of London's projected population growth and climate change on its drains and sewers to understand their ability to cope with these future challenges. The modelling shows that for a relatively common rainfall event in 2050 (one that would be expected on average once every other year), some areas of London, would not have sufficient drainage or sewerage capacity to manage the expected flows, leading to an increasing risk of surface water and sewer flooding.

15.9.3. We will seek to direct development away from areas at the highest risk of flooding, or, where development is required in areas at risk of flooding, we will ensure it is safe for the lifetime of development, without increasing flood risk elsewhere. Development proposals should ensure that they have taken full account of flood risk and sought to utilise sustainable drainage measures.

15.9.4. To reduce the risk of surface water and sewer flooding, all development proposals in the borough that could lead to changes to, and have impacts on, surface water run-off must follow the London Plan drainage hierarchy:

- store rainwater for later use
- use infiltration techniques, such as porous surfaces in non-clay areas.
- attenuate rainwater in ponds or open water features for gradual release to a watercourse
- attenuate rainwater by storing in tanks or sealed water features for gradual release to a watercourse discharge rainwater direct to a watercourse.
- discharge rainwater to a surface water drain

- discharge rainwater to a combined sewer

15.9.5. As well as managing flood risk, consideration should be made for how rainwater harvesting systems can be used to minimise the use of mains water, as promoted by Policy CC2.6 *Sustainable Design Standards*.

Sustainable Drainage System (SUDS)

15.9.6. SUDS is a drainage and landscaping scheme which utilises a 'management train' of various drainage techniques used in series to mimic as closely as possible the natural site's processes, thereby mitigating and managing the impact of a development on flood risk, water quality and biodiversity and amenity value.

15.9.7. It is important to ensure that new development sites found within Merton's Strategic Flood Risk Assessment identified area of 'increased risk of surface water ponding' implement surface water attenuation. It is imperative that this policy is read in conjunction with other Local Plan flood management policies and Merton's Sustainable Drainage and Design and Evaluation Supplementary Planning Document (SPD) (known as the SUDS SPD).

15.9.8. Merton's SUDS SPD supplies further guidance and support to the Local Plan policies relating to flood risk (from all sources) and SUDS. The SPD sets out our expectations on designing, maintaining and managing SUDS and is a material consideration as part of planning decisions.

Green roofs and walls

15.9.9. The design and operational needs of a green roof or wall should not place undue stress on water supply and other natural resources. Extensive green roofs, which are suitable for flat and pitched roofs and for retrofitting, with minimal maintenance and no requirement for irrigation once established, are particularly encouraged. All green and brown roof systems should use a high percentage of recycled products.

15.9.10. The provision of green roofs does not negate the need to make adequate open space provision on the ground. Any proposals for accessible green roofs need to be designed for security and safety and not adversely affect neighbouring properties.

15.9.11. The use of green roofs and green walls in smaller developments, renovations, conversions, extensions and retrofitting is encouraged and supported, where opportunities arise. Conditions will be used where proper to secure the proper installation, maintenance and responsibility for green roofs and walls.

Policy P15.10

Improving Air Quality and Minimising Pollution

a. We will ensure that local environmental impacts of all development proposals do not lead to detrimental effects on the health, safety and the amenity of existing and new users or occupiers of the development site, or the surrounding land. These potential impacts can include, but are not limited to, air pollution, water pollution, noise and vibration, light pollution, odours and fumes, solar glare and solar dazzle as well as land contamination.

b. Several policies in the local plan contribute to reducing and/or mitigating the impacts of air pollution such as transport, green infrastructure, design and climate change polices. Developers must follow any guidance provided by Merton Council on local environmental impacts and pollution as well as on noise generating and noise sensitive development. Where necessary, we will set planning conditions to reduce and mitigate pollutant impacts.

Air Quality

c. Major developments in Merton and large-scale development subject to an Environmental Impact Assessment (EIA) should achieve Air Quality Positive Approach status.

d. All developments must be at least Air Quality Neutral and resist development proposals which would materially increase exceedances of local air pollutants and have an unacceptable impact on amenity or health unless the development mitigates this impact through physical measures and/or financial contributions to implement proposals in the Merton's Local Air Quality Management Plan.

e. Development proposals in Air Quality Focus Areas (AQFAs) or development proposal that are likely to be used by large numbers of people particularly vulnerable to poor air quality, such as children or older people should demonstrate that design measures have been used to minimise exposure following London Plan policy SI 1: *Improving air quality.*

f. Residential development proposals and change of use to residential at street level will need to submit an Air Quality Impact Assessment in areas of poor air quality.

g. Development proposals must consider the impact of introducing new developments in areas already subject to poor air quality, the following will be needed:

    i. An Air Quality Impact Assessment, including where necessary, modelled data.

ii. Mitigation measures to reduce the development's impact upon air quality including the type of equipment installed, thermal insulation and ducting abatement technology.
iii. Measures installed in the new development to protect the occupiers of new developments from existing sources of pollution.
iv. Strict mitigation for developments to be used by sensitive receptors such as schools, hospitals, care homes, areas of deprivation and in areas of existing poor air quality; this also applies to proposals close to developments used by sensitive receptors.
v. The use of green infrastructure, including trees and hedgerows to reduce the exposure to air pollution to absorb dust and other pollutants.

h. Development proposals will be expected to demonstrate how they will minimise air pollution associated with the transport requirements including delivery, servicing and construction vehicles.

i. All decentralised energy schemes to demonstrate that they can be used without having an unacceptable impact on air quality. Where this is not possible, Combined Heat and Power (CHP) systems will not be prioritised over other air quality neutral technologies.

j. We will seek financial contributions using planning obligations towards air quality measures where a proposed development is not air quality neutral, or mitigation measures do not reduce the impact upon poor air quality.

Noise and vibration

k. Development proposals will be expected to:
i. Provide a noise assessment of any new plant and equipment and its impact upon both receptors and the general background noise levels.
ii. Provide mitigation measures where noise needs to be controlled and managed.
iii. Agree to time limits and restrictions for activities where noise cannot be sufficiently mitigated.
iv. Use good acoustic design within their development.
v. That where applicable suitable mitigation measures will be sought by planning obligation or condition.
vi. Minimise noise from servicing and deliveries.
vii. Protect the relative tranquillity in and around open spaces.

l. New noise generating developments should be appropriately located to minimise their impacts on noise sensitive land uses and noise-sensitive developments should be located away from noise priority locations and noise generating land uses.

m. New development which would have a significant effect on existing or future occupiers or the local amenity due to noise or vibration will not be allowed unless the potential noise problems can be overcome by suitable mitigation measures.

n. Where a noise-sensitive development is seeking planning permission to locate in an already noisy area (e.g. a town centre or near a busy road), the new noise-sensitive development will be responsible for mitigating impacts from existing noise-generating activities in line with the Agent of Change principle set in the National Planning Policy Framework and the London Plan.

o. We will support good acoustic design and use of innovative technologies to minimise noise levels.

p. Where necessary, applicants will be expected to carry out noise assessments and provide details of the noise levels on the site. Where noise mitigation measures will be required to enable development to take place, an outline application will not normally be acceptable.

Light pollution

q. The potential adverse impacts from lighting arrangements will be controlled by requiring all developments that include proposals for external lighting including illuminated signs and advertisements, security and flood lights and other illuminations to submit details in line with the recommendation of the Institute of Lighting Professionals. Lighting details must show that it:

    i. is appropriate for the intended use,
    ii. provides the minimum amount of light necessary to achieve its purpose and designed to minimise the detrimental impact of glare and light spill on the local amenity, nature, biodiversity and highways,
    iii. is energy efficient and
    iv. provides adequate protection from glare and light spill, particularly to nearby sensitive receptors such as residential properties and Nature Conservation Areas, including the River Wandle.

r. Development proposals for leisure, sport and/or play facilities must follow Sport England's Artificial Lighting Guidance and London Plan policy S5 Sports and recreation facilities.

Odours and fume control

s. Merton Council will ensure that any potential impacts relating to odour and fumes from commercial activities are mitigated by requiring the following:

    i. An impact assessment where necessary.
    ii. The type and nature of filtration to be used.
    iii. The height and position of any chimney or outlet.
    iv. Promotion and use of new abatement technologies.

Land contamination

t. When development is proposed on or near a site that is known to be, or there is good reason to believe may be, contaminated, or where a sensitive use is proposed, the applicant must carry out a site assessment and submit a report of the findings to establish the nature and extent of the contamination. Development will not be permitted unless practicable and effective measures are to be taken to treat, contain or control any contamination.

u. Developments must incorporate proper remediation measures for development on or near a site which is potentially contaminated.

v. Development will not be allowed unless practical and effective measures are taken to treat, contain or control any contamination so as not to:
    i. Expose the occupiers of the development and neighbouring land uses including, in the case of housing, the users of open spaces and gardens to unacceptable risk.
    ii. Threaten the structural integrity of any building built, or to be built, on or adjoining the site.
    iii. Lead to the contamination of any watercourse, water body or aquifer.
    iv. Cause the contamination of adjoining land or allow such contamination to continue.

w. We will not approve any application that the Health and Safety Executive (HSE) has recommended that permission should not be granted.

Managing pollution from construction and demolition

x. We will seek to manage and limit environmental disturbances during construction and demolition as well as during excavations and construction of basements and subterranean developments.

y. To deliver this we require the submission of Construction Management Statements (CMS) for the following types of developments:
    i. All major developments.
    ii. Any basement and subterranean developments.
    iii. Developments of sites in confined locations or near sensitive receptors; or
    iv. If substantial demolition/excavation works are proposed.

z. Where applicable and considered necessary, we may seek a bespoke charge specific to the proposal to cover the cost of monitoring the CMS.

aa. For major development, applicants should show how they have considered Merton's Air Quality Action Plan, Merton's Air Quality Supplementary Planning Document 2021, Merton's emerging

Non-Road Mobile Machinery (NRMM) Practical Guide, Dust Controls and Logistics Planning from the earliest stage in the design and construction method of their development.

bb. Construction and demolition sites must ensure silt does not enter the local drainage systems or watercourses and is carefully controlled and managed on site to prevent pollution and environmental damage.

i. It is essential construction and demolition sites follow the Right Waste Right Place guidance and Waste Management Duty of care of practice to ensure construction and demolition waste is managed correctly to prevent pollution and miss description of waste.

ii. Pollution incidents should be reported to Environment Agency 24-hour incident hotline

iii. Vacant development sites should introduce increased security measures such as high security fencing/ concrete bollards and 24-hour security to prevent trespassing and illegal waste operators moving into vacant development sites to deposit large amount of fly tipping and then abandon sites. Justification

cc. The design and layout of new development must endeavour to minimise conflict between different land uses, taking account of users and occupiers of new and existing developments. Any noise and polluting activities or feature such a plant equipment should be located away from sensitive areas, where possible to ensure that there are no detrimental impacts on living conditions, health and wellbeing or local amenity.

dd. Where there are, already significant adverse effects on the environment or amenity due to pollution, sensitive uses should be steered away from such areas. However, given the limited availability of land for development in the borough, this will not always be possible. Therefore, new developments, including changes of use, should mitigate and reduce any adverse impacts resulting from air and light pollution, noise, vibration and dust to acceptable levels.

ee. Operations that are likely to give rise to noise, dust, vibration, odour or other pollutants are also controlled by the licensing regulations implemented by Merton's Environmental Health Team, Pollution Teams and the Environment Agency. We advise that applicants to discuss proposals with potential adverse impacts on air, land, light pollution, noise and water at the initial stages of the planning application process with Merton's Environmental Health Team.

Justification

Air quality

15.10.1. NPPF Paragraph 181 states that Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement Air Quality Impact Assessments (AQA). All policies in this local plan policies will play a role in reducing and mitigate against the exposure to poor air quality that causes harm to health, including other green infrastructure and health and wellbeing polices. Supported by Merton's Air Quality Action Plan, Climate Change Strategy and action plan, Merton's Health and wellbeing strategy and Merton's Air Quality Supplementary Planning Document (SPD) these documents, support the local plan and outline steps we are taking to improve air quality in the borough.

15.10.2. Air pollution not only is only detrimental to health and wellbeing but also has impacts on the environment and economy. The World Health Organization (WHO) identifies air pollution as the greatest environmental risk to human health, with 90% of the world's urban population living in cities exceeding its air quality guidelines. In the UK (United Kingdom) each year, it contributes up to 37,000 deaths and costs city-regions over £20bn. In the UK 5.4 million people are living with asthma, around 1 million have 'difficult' asthma which includes an estimated 200,000 adults and children in the UK with 'severe' asthma, a condition that needs specialist assessment and bespoke support and treatments according to the Asthma UK. There is emerging evidence which shows that air pollution increases the number and severity of COVID-19 cases.

15.10.3. The local plan can influence air quality in several ways, for example through what development is proposed and where, and the provision made for sustainable transport. Consideration of air quality issues at the plan-making stage can ensure a strategic approach to air quality and help secure net improvements in overall air quality where possible. The whole borough has been declared an Air Quality Management Area (AQMA) for last two decades.

15.10.4. We seek to tackle poor air quality in an integrated way, the Local Plan together with a wider range of measures set out in Merton's Air Quality Action Plan, which supports the Government's Clean Air Strategy (2019), the Mayor of London Environment Strategy (2018) and other legislation.

Air Quality Assessments (AQA)

15.10.5. We require that air quality issues to be considered early in the planning process and to be assessed in detail if necessary (i.e. for developments that may increase local emissions significantly) is the best way of establishing a design led approach to mitigating those emissions and reducing exposure. Further assessments should be carried out as the design evolves to ensure that impacts from emissions are prevented or minimised as far as possible, and to fully quantify the expected effect of any proposed mitigation measures, including the cumulative effect where other nearby developments are also underway or likely to come forward.

15.10.6. Air Quality Assessments should include 'air quality neutral' assessments carried out with reference to the GLA's emission benchmarks for buildings, transport and combustion-based energy plant. Developments that do not exceed these benchmarks will be 'air quality neutral'.

15.10.7. New developments are expected to contribute towards improving local air quality, particularly where they include potentially major new sources of emissions or could significantly increase traffic-generated emissions. Some developments such as schools, nurseries, hospitals and care homes for the elderly and housing, may be particularly affected by the potential impacts of poor air quality on the occupants of the development. Therefore, development that may result in an adverse impact on air quality including during construction, may require an Air Quality Impact Assessment in order to consider any pollution impact linked to development proposals.

15.10.8. Necessary mitigation measures will be secured through negotiation on a scheme or using planning obligations or conditions where appropriate. Further guidance and more information on our air quality aims and priorities can be found in Merton's Air Quality Action Plan (AQAP) and Merton's Air Quality Supplementary Planning Document SPD 2021.

Air Quality Neutral and Positive

15.10.9. We have adopted the London Plan's approach to Air Quality Positive and Neutral development. Large master planning and large-scale developments have the potential to include methods to improve local air quality. All other major developments should not make air quality worse and are encouraged to achieve an overall improvement to air quality. The Air Quality Neutral requirement also applies to developments incorporating Solid Biomass Boilers and CHP (Combined Heat and Power) due to the potential impact of these technologies on air quality. When all measures to achieve Air Quality Neutral status have been exploited, financial contributions to offset the impact of the development on air quality may be considered as a final intervention.

15.10.10. The aim of an AQA is to identify any significant impact on local air quality and/or amenity due to dust and/or odour and/ or whether new development will introduce new exposure in an area of poor air quality. The contents of the AQA will depend on the nature of the proposed development.

15.10.11. Consideration must be given to the impact of improvements on air quality elsewhere. For instance, traffic reductions could improve local air quality but push traffic-related air quality impacts to other areas. Early engagement with us is encouraged to assess how the development could avoid these unintended consequences. The supporting emerging Air Quality Supplementary Planning Document (SPD) provides further details on AQA and what we expect to be proved within an AQA. The assessment should provide decision makers with sufficient information to understand the scale and geographic scope of any detrimental, or benefit, impacts on air quality and enable them to exercise their professional judgement in deciding whether the impacts are acceptable, in line with best practice.

Air quality and green infrastructure

15.10.12. Overall, vegetation and trees are regarded as beneficial for air quality, but they are not a solution to the air quality problems at a city scale, reducing vehicle journeys and adopting behavioural changes is key to improve our air quality.

15.10.13. The value of green infrastructure for urban air quality lies in its ability, not to remove pollution, but rather to control the distribution by strategically enhancing (or reducing) its dispersion close to its source for example at the roadside. It acts as a barrier that reduces the public exposure to what is emitted and thereby further improve public health outcomes. However, we still need to create environments that incentivise behaviour changes in the way we travel and encourages walking, cycling and other sustainable modes. The design quality of our streets is crucial in producing attractive environments at a human scale, with reduced air and noise pollution and opportunities to connect with nature.

Air quality and combined Heat and Power (CHP)

15.10.14. Some carbon reduction measures for energy generation and spatial heating can adversely impact local air quality if not properly mitigated. The use of individual Combined Cooling, Heating and Power (CCHP), Combined Heat and Power (CHP) and Biomass to produce heat and power can deliver significant reductions of CO2. However, the use of these technologies could also lead to increases in NO2 and particle emissions. Therefore, their air quality impacts need to be assessed as part of an Air Quality Assessment. CHP or other combustion-based technologies that cannot demonstrate that they will have

acceptable impacts will not be accepted and instead the use of other sustainable energy generation air quality neutral technologies should be used which reduce both CO2 and NO2 emissions.

Air quality, pollutants and transport

15.10.15. We will ensure that new development in Merton is adequately managed and integrated with the transport network, including public transport, pedestrian and cycle networks, to enable it to accommodate growth in a sustainable manner, so that it does not contribute further to air quality deterioration, increased noise and congestion. As set out in the Transport Policies, Transport Assessments/Statements will be required for development proposals so that transport impacts of development proposals can be properly identified and addressed.

15.10.16. Freight, servicing and delivery vehicles, particularly heavy goods vehicles are a significant source of noise and air pollution, particularly around commercial and industrial locations. Delivery and servicing trips have been increasing in London which has been accelerated recent rapid market evolution in home delivery for a range of services as a result of the pandemic. However, low carbon alternatives such as electric vans and cargo bike deliveries have also started to appear. Where a development is likely to generate a significant amount of movement by goods or delivery vehicles we will require the development of a Delivery and Servicing Plan in accordance with TfL's latest guidance. A Delivery and Service Plan provides a strategy to improve the safety, efficiency and sustainability of delivery and servicing vehicles through a range of interventions including consolidation, low carbon delivery modes and the retiming of movements to avoid peak hours.

Noise and vibration

15.10.17. Noise and vibration pollution affect both health and behaviour. Characteristics that cause or increase noise pollution such as poorly located emission sources, street canyons and noise sources should also be designed out wherever possible. The main source of ambient noise in Merton is road traffic. However, other activities such as construction, busy high or night-time activities may also impact on noise levels. Therefore, it is important that new development assists in reducing potential exposure. Development proposals need to consider acoustic design at an early stage of the planning process to ensure occupiers of new and noise sensitive buildings are protected.

15.10.18. For a long time, the responsibility for managing and mitigating the impact of noise on neighbouring residents and businesses has been placed on the business or activity making the noise, regardless of how long the noise-generating business or activity has

been operating in the area. In many cases, this has led to newly arrived residents complaining about noise from existing businesses, sometimes forcing the businesses to close.

15.10.19. The Agent of Change principle, set out in the London Plan (2020) and the National Planning Policy Framework, places the responsibility for mitigating the impact of noise firmly on the new development. This means that where new developments are proposed close to existing noise-generating uses, applicants will need to design them in a more sensitive way to protect the new occupiers, such as new residents, businesses, schools and religious institutions, from noise impacts. This could include paying for soundproofing for the existing noise generating uses, such as an existing music venue.

15.10.20. The Agent of Change principle works both ways. If a new noise-generating use is proposed close to existing noise-sensitive uses, such as residential development or businesses, the onus is on the new use to ensure its building or activity is designed to protect existing users or residents from noise impacts.

15.10.21. Noise generating cultural venues such as theatres, concert halls, pubs and live music venues should be protected. This requires a sensitive approach to managing change in the surrounding area. Adjacent development and land uses should be brought forward and designed in ways which ensure established cultural venues still are viable, contribute to the local economy and can continue in their present form without the prospect of licensing restrictions or the threat of closure due to noise complaints from neighbours.

15.10.22. Housing and other noise sensitive development proposed near to an existing noise generating use should include necessary acoustic design measures. This will ensure new development has effective sound insulation to mitigate and minimise potential noise impact or neighbour amenity issues. Mitigation measures should be explored at an early stage in the design process, with necessary and right provisions secured through planning obligations.

15.10.23. Noise from construction during building of developments will be managed through use of planning conditions.

Light pollution

15.10.24. The links of light pollution on human health and wellbeing has been documented for several decades. Recently the effects of light pollution on plants and animals are becoming more known. Light pollution can alter and interferes with the timing of necessary biological activities of wildlife. We will support well designed artificial lighting that, maximises the positive aspects and minimises its impact on local amenity and wildlife.

15.10.25. We will expect new buildings to be designed to minimise light pollution from internal and external lighting. We will use the relevant professional standards as a guide to assessing light impacts such as the Institute of Lighting Professionals.

15.10.26. Lighting can be important for the accessibility of outdoor sports facilities and can help to improve their use. In new developments to help provide a healthy and safe environment it can also be used to enhance the appearance of some buildings. The form of lighting required will depend on the facility and its use, but efforts should be made to minimise the impact on the surrounding areas, and not to cause a demonstrable harm to the local community, biodiversity or local wildlife. Excessive lighting can have a negative impact on residents' quality of life, adversely affect wildlife, contribute to 'sky glow' and energy waste. Requiring the submission of details of external lighting in line with the recommendations of the Institute of Lighting Professionals for approval will allow external lighting and its impacts to be controlled and minimised.

Odours and fume control

15.10.27. Some commercial activities can have an impact upon the local environment. These impacts can include such things as odours, fumes, dust and steam. It is important that activities that create odour do not affect the surrounding amenity or the adjoining highway. Where appropriate, we will require odour assessments to make sure potential impacts are appropriately mitigated. Permitted development rights mean that some developments can accommodate a wide range of uses without the need for planning permission to change between them. Proposals for such uses, such as hot food premises, will require mitigation measures to be incorporated to prevent unacceptable odour issues arising in the future.

15.10.28. As part of the development process we require that steps be taken to ensure that any impact is considered carefully, and that mitigation is in place to manage these types of emissions. Applicants will be needed to apply the Department for Environment, Food and Rural Affairs' (DEFRA) Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems.

Land contamination

15.10.29. Industrial activity, waste disposal, accidental spillages and transportation can cause contamination of land. Often this contamination is associated with industrial processes or activities which are now not active, such as former printworks and other activities that were part of the Wandle Valley's industrial heritage. According with the requirements of the Environmental Protection Act 1990, we maintain a register of contaminated land sites in the borough. We will require developers to undertake a site investigation of any

contamination of sites. The investigation must prove the nature and extent of the contamination prior to determining the application.

15.10.30. Where development is proposed on a site that is known or believed to be contaminated, the need to carry out remediation or monitoring and to ensure adequate disposal of contaminated soil will be secured by planning conditions. We will consult and seek advice from Environment Agency when considering applications on contaminated land.

15.10.31. The redevelopment of previously developed land (or 'brownfield') sites for beneficial uses, many of which are potentially affected by contamination, provides an opportunity to deal with the potential risks posed by contamination to human health and the natural environment.

15.10.32. Contamination sensitive development would typically include developments that potentially put people in direct contact with contamination, such as a new home, parks and open space or school uses.

15.10.33. Hazardous Gas Installations also affects parts of Merton. We will consult the Health and Safety Executive (HSE) on planning applications using methodology and software known as PADHI, which is available online. The HSE provides advice on safety grounds as to whether planning permission should be granted. Information on whether a site is affected by this requirement is available from the council.

Construction and demolition

15.10.34. There is a need to ensure that occupiers are protected from environmental disturbances during the construction and demolition phase of major developments, and during excavating and construction of subterranean developments such as basements.

15.10.35. We expect applicants and contractors to mitigate the construction impact, to implement good site management and communication, and proactively engage with the local community and affected residents. Innovative methods of construction to reduce nuisance and emissions from construction should be implemented where possible.

15.10.36. We requires the submission of Construction Management Statements (CMS) for the types of developments as set out in the policy. In addition, Merton's Basement and Subterranean SPD 2017, sets out guidance to ensure that problems relating to excavation and constructions of basements, such as highway/parking impacts, noise, dust, vibration and disturbance to neighbours, are avoided.

15.10.37. To manage the environmental impacts and ensure that the Construction Management Statements are adhered to, we will seek a charge to the applicant/developer to cover the

cost of monitoring the CMS. Where an applicant/developer uses the Merton Council Building Control, a discount may be applied to this charge.

15.10.38. We may also require a management plan that sets out how developers monitor dust, noise and vibration, and where necessary take the action if issues arise. It will also be necessary to control the hours of operation for noisy site works and the processes that would need to be followed to work outside these hours when and if required.

15.10.39. In line with the transport policies, we may also require a Construction Logistics Plan (CLP) in areas that are subject to high traffic congestion to ensure that vehicles entering the site do not adversely impact on local traffic.

15.10.40. As part of our commitment to better air quality, we will also ask, through planning conditions, that the current regulations relating to Non-Road Mobile Machinery (NRMM) is imposed where necessary.