Dear Ann Clarke,


Thank you for consulting the Environment Agency on the above. We responded to the Sustainability Appraisal Scoping Report, Draft Sites and Policies DPD and Draft Proposals Map in March 2012.

We are pleased to note that additional documents we recommended in our previous consultation have been included in the ‘Site & Policies DPD and Proposal Map Preferred Options (Stage 2a) Appendix A Review of other plans’. We support paragraph 13.4 of the Sustainability Appraisal conclusion which includes flood risk as one of the areas of concern within the borough and it is fundamental that any potential development takes this into account. We would wish to provide comments on the following key environmental issues:

- The Wandle Catchment Plan
- Development and Flood Risk
- Biodiversity and Riverside Sites
- Groundwater and Land Contamination

Our comments are attached in Annex 1 below.

We hope our response will assist the council to identify and address our key planning issues and environmental concerns and promote sustainable development.

Please do not hesitate to contact me should you wish to discuss this further.

Yours faithfully,

Charles Muriithi
Planning Technical Specialist

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Annex 1 – Key environmental issues

The Wandle Catchment Plan

Site proposals 37, 64, 70 and 71 are relevant to the development of the Wandle Valley Regional Park and the delivery of the Wandle Catchment Plan. The Environment Agency Thames Catchment Flood Management Plan (Thames CFMP) (September 2006) confirms that land for future flood risk management will be identified and protected by local authorities.

We would expect the Board of the Wandle Valley Regional Park (WVRP) to be one of those consulted by the council, and through that the Wandle Forum would be able to contribute comments on those developments proposed next to the River Wandle. The London Borough of Merton has been involved with the WVRP proposal for many years and also sits on the Board. There is no mention of the Vision for Wandle Valley Regional Park (2006), or the All London Green Grid, Wandle Valley Area Framework in ‘Appendix A - Review of Other Plans’.

The Environment Agency would be looking for planning gain funds to contribute towards meeting our objectives. To prepare potential project details that would benefit from CIL/Sec 106 we will need to continue our work with the Wandle Trust (developing the Catchment Plan) and ideally to have completed the investigation process by December 2012.

Development and Flood Risk

Sites Proposal 37, 64 and 70

The consultation document acknowledges that these sites and their surroundings are within the functional floodplain of the river Wandle (Flood Zone 3b). The sites are also within critical drainage areas for surface water flooding. As mentioned above these sites are also critical for the delivery of the Wandle Catchment Plan and the proposed Wandle Valley Regional Park.

These sites are not suitable for residential development. We do not believe that any mitigation measures can address the issues associated with the functional floodplain and with the critical drainage areas to minimise flood risk for future occupiers and the potential for water pollution from the site. Paragraph 16 of the Technical Guidance to the National Planning Policy Framework states inter alia that flood resistance and resilience measures should not be used to justify development in inappropriate locations.

London Borough of Merton adopted Core Strategy (July 2012) policy CS 16 Flood Risk Management indicates the willingness of the borough to work with the Environment Agency, landowners and developers, based on the findings of the most recent Strategic Flood Risk Assessment and other plans, to manage and reduce flood risk from all sources of flooding. Paragraph 24.4 states inter alia

‘To minimise flood risk in Merton, development is only permissible in areas at risk of flooding where it can be demonstrated that there are no reasonably available sites in areas of lower risk and that the benefits outweigh the risks from flooding, for example, the development must first pass the sequential test and where necessary, the exception test as set out in NPPF and the Strategic Flood Risk Assessment for the river Wandle and its tributaries’. 
The Environment Agency Thames Catchment Flood Management Plan (Thames CFMP) (September 2006) confirms that flood defences cannot be built to protect everything. The ongoing cycle of development and urban regeneration is a crucial opportunity to manage flood risk. We have referred to all these policies and guidance to thwart any attempts to utilise these sites for residential development.

The effectiveness of rivers and floodplains to convey and to store flood water, and minimise flood risks, can be adversely affected by human activity, especially by development which physically changes the floodplain. Risk to life is of primary concern in relation to any development in areas at risk from flooding, but especially for residential development.

Merton SFRA- Beverley / Pyl Brook and River Wandle Fluvial Flood Zone 3b (Developed Areas) inter alia states that “Redevelopment of previously developed land should typically be restricted to ‘less vulnerable’ uses. ‘More vulnerable’ uses should generally be opposed and only considered within sites of equivalent existing use”.

The floodplain is our biggest asset in managing flood risk and meeting the future challenge of climate change. Floodplains should be safeguarded to protect their natural role in allowing for the storage and free flow of flood waters. Inappropriate development within floodplains should be resisted where such development would itself be at risk from flooding or may cause flooding elsewhere.

The protection of floodplains from the physical threats posed by development is dependent on the powers exercised by local planning authorities. This is in line with paragraph 24.8 of London Borough of Merton adopted Core Strategy (July 2012) which states inter alia that ‘In order to reduce flood risk, we will work with landowners, developers and other stakeholders to: Ensure that floodplains operate efficiently, are protected and where possible restored; Realise the multifunctional nature of floodplains and deliver this through effective land use planning…’

Surface Water Flooding

Sites Proposal 69, 71, 73

These sites are susceptible to surface water flooding. The Council should ensure new development in an area known to suffer surface water flooding does not increase the discharge to the existing drainage system either though restricting site discharge rates and/or through capital contributions to improvements works of the existing drainage infrastructure. In areas where the potential for surface water flooding has been identified, Flood Risk Assessments should ensure suitable SuDS techniques are incorporated as part of redevelopment. Potential overland flow paths should be considered to ensure that buildings do not obstruct flows.

The SFRA recommends that London Borough of Merton should encourage the retention of soft landscaping in front gardens and other means of reducing, or at least not increasing the amount of hard standing associated with existing homes. Opportunities should be sought to reduce the risk of flooding from the sewer network through consultation with Thames Water to determine key areas for maintenance and flood alleviation schemes.

Site Proposal 71 is also identified as essential to the delivery of Wandle Catchment Plan and the proposed Wandle Valley Regional Park.
Critical Drainage Areas

Sites proposal 76, 78, 80 and 81
These sites are within Critical Drainage Areas and therefore there is a need for development proposals to incorporate suitable mitigation measures to address the issues associated with the Critical Drainage Area. These areas have a combination of the following:-

• existing flood records;
• constraints on existing drainage systems;
• flood defence schemes with surface water related problems;
• sensitive receiving environments;
• the potential for development which may change drainage patterns.

These constraints mean that drainage of surface water requires extra consideration to reduce flood risk. Site proposal 76 also lies within an area of Increased Potential for Elevated Groundwater (iPEG)

To avoid exacerbating any surface water flood risk, and to improve flood risk management in the wider catchment, we recommend that a sustainable drainage strategy is integrated into any proposals at an early stage. The use of green roofs, swales, detention ponds or wetlands would provide habitat and amenity benefits as well as improving the quantity and quality of runoff.

The 2007 floods highlighted the need for better planning and management of surface water flood risks. The council should lead and coordinate the production of Surface Water Management Plan (SWMP) that considers flood risk from surface water, groundwater and ordinary watercourses. The plan should include an assessment of flood risk from these sources and a programme of actions to manage these risks. SWMP will help put in place:

• support for greater use of Sustainable Drainage Systems (SuDS) to help avoid large investments in unsustainable hard infrastructure;
• identify design approaches that avoid and reduce flood risk to and from new development;
• information to improve emergency planning decisions for local authorities

Biodiversity and Riverside sites
We have reviewed the Draft Sites and Policies DPD and are satisfied that designated nature conservation sites, open green space and biodiversity issues adjacent to the site proposals have been identified and highlighted as issues for the majority of sites. However, we have identified the following exceptions:

• Site 37: Lambeth Cemetery- SINC is located over Plough Lane to the east of the site.
• Site 72: Atkinson Morley’s Hospital Woodland -SINC adjacent to the west of the site.
• Site 81: Pollards Hill -SINC over Recreation Way to the north of the site.

The River Wandle runs adjacent to Site 64 and Site 70, a culvert runs across the north east corner of Site 37, and the Beverley Brook runs to the west of the proposed Burlington Road Strategic Industrial Locations. Development at these locations should not prevent future river restoration or the achievement of WFD objectives.
Developments affecting the waterbodies may also require WFD compliance assessment.

**Main River**
Under Section 109 of the Water Resources Act 1991 and/or EA Thames Region's Byelaws, any works in, over, or under or within 8 metres of the top of the channel of any statutory main river requires Environment Agency consent. Furthermore the Environment Agency would seek an 8 metre wide undeveloped buffer strip alongside main rivers, and would also ask developers to explore opportunities for river restoration as part of any development.

**Ordinary watercourses**
The Environment Agency requires a 5 metre undeveloped buffer strip alongside such watercourses. This is to allow access for maintenance and encourage conservation and wildlife habitats.

**De-culverting**
Environment Agency would seek de-culverting as part of a development over or in ownership of a culverted structure.

We have reviewed the documents and although there is a brief mention to the Water Framework Directive (WFD) in document "Stage 2a - Appendix A Review of Other Plans" - Section 2 International Context, sub-section 2.1, this requires more emphasize. The area of Merton lies within the Thames River Basin and within this area are a number of significant water bodies. The River Wandle and Beverly Brook have poor ecological status under the Water Framework Directive. The requirements of the WFD are as important as the requirements of Habitats Directive. We would recommend this to be acknowledged in the in Merton Sites and Policies DPD.

Directive 2000/60/EC the ‘Water Framework Directive’ establishes a legal framework for the protection, improvement and sustainable use of water bodies and applies to all surface water bodies, including rivers, streams, brooks, lakes, estuaries and canals, coastal waters out to one mile from low water, and groundwater bodies. The overall aim of the WDF is for all water bodies to reach good status by 2027, this means improving their physical state and preventing deterioration in water quality and ecology.

Regulation 17 of the Water Environment (WFD)(E&W) Regulations 2003 places a duty on each public body including local planning authorities to ‘have regard to’ River Basin Management Plans, which we publish to help identify measures that will achieve WFD requirements for all water bodies in England and Wales. We advise planning decision makers to:

- consider, at the earliest opportunity, the risk that proposed development would lead to deterioration of a water body in the RBMP or would prevent achievement of water body objectives;
- include, for a development plan, an assessment of impacts on water bodies in their sustainability report;
- require, for planning applications, an assessment of impacts on water bodies where we are a statutory consultee, to be included in the Environmental Statement, where appropriate;
- take into account any assessment we carry out for an environmental permit or other licence or consent.
Groundwater and Land Contamination

Much of Merton's borough is located over Secondary Aquifers and there are groundwater Source Protection Zones in the eastern central and south-eastern areas. The comments provided below are made in relation to these Controlled Waters and the previous uses of the 15 sites identified for new uses.

<table>
<thead>
<tr>
<th>Site Proposal</th>
<th>Opportunities and Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 37 Wimbledon Greyhound Stadium</td>
<td>Secondary Aquifer, no SPZ. Industrial setting. Will require Phase 1 Assessment for contamination potential, and Phase II Investigation if contamination known or suspected</td>
</tr>
<tr>
<td>Site 64 12 Ravensbury Terrace</td>
<td>Secondary Aquifer, no SPZ. Adjacent to River Wandle. Will require Phase 1 Assessment for contamination potential, and Phase II Investigation if contamination known or suspected.</td>
</tr>
<tr>
<td>Site 65 Kenley Road Car Park</td>
<td>Secondary Aquifer, no SPZ. Will require Phase 1 Assessment for contamination potential, and Phase II Investigation if contamination known or suspected.</td>
</tr>
<tr>
<td>Site 69 Sibthorpe Road Car Park</td>
<td>Secondary Aquifer, no SPZ. Will require Phase 1 Assessment for contamination potential, and Phase II Investigation if contamination known or suspected.</td>
</tr>
<tr>
<td>Site 70 Haslemere Industrial Estate</td>
<td>Secondary Aquifer, no SPZ. Industrial setting. Will require Phase 1 Assessment for contamination potential, and Phase II Investigation if contamination known or suspected.</td>
</tr>
<tr>
<td>Site 71 Weir Road / Durnsford Road</td>
<td>No aquifer, no SPZ. Low risk to Controlled Waters.</td>
</tr>
<tr>
<td>Site 72 Wolfson Centre</td>
<td>Secondary Aquifer, no SPZ. Will require Phase 1 Assessment for contamination potential, and Phase II Investigation if contamination known or suspected.</td>
</tr>
<tr>
<td>Site 73 117-125 London Road</td>
<td>Secondary Aquifer, no SPZ. Will require Phase 1 Assessment for contamination potential, and Phase II Investigation if contamination known or suspected.</td>
</tr>
<tr>
<td>Site 74 Southey Bowls Club</td>
<td>Secondary Aquifer, no SPZ. Low risk to Controlled Waters.</td>
</tr>
<tr>
<td>Site 75 Former Mitcham Gasworks</td>
<td>Secondary aquifer, SPZII. Has been extensively investigated and remediation</td>
</tr>
</tbody>
</table>
undertaken. However, there is always the potential for residual, previously unidentified contamination that may need to be further remediated.

<table>
<thead>
<tr>
<th>Site 76 2 South Gardens</th>
<th>No designated aquifer but within SPZI. Will require Phase I Assessment to confirm the absence of potential contamination. Increased Potential for Elevated Groundwater (iPEG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 77 26 Bushey Road</td>
<td>Secondary Aquifer, no SPZ. Has a former petrol filling station and vehicle repair businesses on site. Will require a Phase II investigation to assess whether remediation is required</td>
</tr>
<tr>
<td>Site 78 191-193 Western Road</td>
<td>Secondary Aquifer, SPZI. Industrial use. Will require Phase 1 Assessment for contamination potential, and Phase II Investigation if contamination known or suspected.</td>
</tr>
<tr>
<td>Site 80 Crusoe Road Industrial Buildings</td>
<td>Secondary Aquifer, SPZII. Industrial use. Will require Phase 1 Assessment for contamination potential, and Phase II Investigation if contamination known or suspected.</td>
</tr>
<tr>
<td>Site 81 Moat Housing Estate</td>
<td>No aquifer, no SPZ. Low risk to Controlled Waters.</td>
</tr>
</tbody>
</table>

**Comments on Proposed Designated Industrial Areas**

<table>
<thead>
<tr>
<th>Strategic Location</th>
<th>Opportunities and Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Location 1</td>
<td>In the north near the railway and south of Wimbledon Stadium. This location is above a Secondary Aquifer and adjacent to the River Wandle. Consequently both groundwater and the river are at risk from pollution and/or contamination.</td>
</tr>
<tr>
<td>Strategic Location 2</td>
<td>South of Fortescue Road. This location is above a Secondary Aquifer and within SPZI. Consequently, this is a high risk area with regards to Controlled Waters.</td>
</tr>
<tr>
<td>Strategic Location 3</td>
<td>South of Merantun Way. This location is above a Secondary Aquifer, partially within SPZII and adjacent to the River Wandle. Consequently both groundwater and the river are at risk from pollution and/or contamination.</td>
</tr>
<tr>
<td>Strategic Location 4</td>
<td>To the north of Morden Road. Located above a Secondary Aquifer but not within an SPZ. Moderate risk to groundwater.</td>
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<tr>
<td>Strategic Location 5</td>
<td>In the southeast, centred on Willow Way. This location is above a Secondary Aquifer, partially within SPZI (southern half) and adjacent to the River Wandle. Consequently both groundwater and the river are at risk from pollution and/or contamination.</td>
</tr>
</tbody>
</table>

The Locally Significant Industrial Areas are mostly situated in Secondary or non-aquifer locations. However, the one situated at Garth Road to the southwest is located in an SPZIII.

**SUMMARY COMMENTS.** Where development is proposed in areas of risks to Controlled Waters, then staged site investigations will likely need to be undertaken to assess those risks. Where high-risk areas are designated for industrial usage, occupiers must be made aware of their responsibilities in respect of protection of Controlled Waters.