STATEMENT OF COMMON GROUND

BETWEEN

THE NORTH LONDON BOROUGHS

AND

ENVIRONMENT AGENCY

This Statement of Common Ground has been prepared to identify areas of agreement between the Boroughs working on the North London Waste Plan ("the North London Boroughs") and the Environment Agency. The North London Boroughs are Barnet, Camden, Enfield, Hackney, Haringey, Islington and Waltham Forest. The Statement of Common Ground is on matters relating to the Environment Agency's representations on the Proposed Submission North London Waste Plan (2019) to assist the Inspector during the examination of the North London Waste Plan.

Environment Agency representations

The Environment Agency's representations fall into three categories. The first relates to flood risk assessments and the soundness of the NLWP. The second relates to waste data. The third relates to points of accuracy and clarity suggested for improvement but not related to the soundness of the NLWP.

The Environment Agency's representations are set out in full in Appendix A, alongside the section of the NLWP they refer to.

Areas of Agreement

The approach to flood risk outlined in the updated sequential test report titled North London Waste Plan Flood Risk Sequential Test (V6.0) dated October 2019 is accepted. While the Environment Agency would have preferred a more robust assessment of future flood risk based on the latest climate change allowances, it is considered that any further assessment work is unlikely to change the outcome of the sequential test exercise.

It is agreed that any future waste plan or local plan work will need to fully take account of the published 2016 climate change allowances and any further updates to the allowances. Any developments coming forward within one of the allocated areas will also need to undertake their own Sequential Test that accounts for future flood risk using the most up to date climate change allowances.

The proposed modifications to the Proposed Submission NLWP set out in Appendix B are sufficient to meet the Environment Agency's points on accuracy and clarity (Reps 13.3 and 13.5).

Signed on behalf of the North London Boroughs

Archie Onslow

Signed:
Archie Onslow
Programme Manager, North London Waste Plan
Date:

Signed on behalf of the Environment Agency

Eleri Randall

Signed: ELERI RANDALL
PLANNING ADVISOR

Date: 05/11/2019

Appendix A: Representations from Environment Agency

Code	Section	Policy / Para	Representation
13.1	8	8.21	Without an up to date and robust flood risk evidence base, including a latest Strategic Flood Risk Assessment SFRA (Level 2) to underpin sequential test and sites and areas allocated, the **NLWP is not justified and we therefore find it unsound**. Updated evidence documents are not available to support the plan or to justify the promotion of certain sites within areas at risk of flooding. The SFRA contains out of date flood risk information, which does not provide a suitable basis to inform the NLWP. In addition the NLWP it is **not consistent with national planning policy** as we therefore also find it **unsound** on this basis. The plan is not underpinned by relevant and up-to-date evidence which is a requirement of Paragraph 31 of the National Planning Policy Framework (NPPF). It does not comply with Paragraph 157 of the NPPF, which requires all plans (which would include the NLWP) to apply sequential, risk-based approaches to the location of development, taking into account current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property. We have not seen a suitable assessment provided of future flood risk taking the impacts of climate change into account. As there is insufficient information upon which to base the Sequential Test and the future impacts of climate change on flood risk have not been appropriately assessed, we therefore find the NLWP **unsound.** We have no issues with the information from the Boroughs' own SFRAs being used to support the NLWP. However even with this information there are significant data gaps in terms of flood risk. This is because a number of the SFRAs pre-date the 2016 climate change guidance, which means they do not provide the necessary assessment of future flood risk to inform the NLWP. All bar one of the boroughs own SFRAs were produced in 2011, which means they are not based on the most up to date flood risk data, so are not

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			suitable data sources to be drawn upon as part of the supporting information for the NLWP. Since 2016 we have been using updated climate change allowances for assessing future flood risk. Based on Paragraph 9 of the planning practice guidance for flood risk and coastal change, SFRAs should assess the risk to an area from flooding from all sources, now and in the future, taking account of the impacts of climate change, and to assess the impact of land use changes and development in the area will have on flood risk. As we have not seen an SFRA that uses the most up to date data and assesses future flood risk in accordance with current guidance, we cannot consider there to be an adequate SFRA to base the Sequential Test. In addition the Sequential Test document submitted states: *2.7 The site specific flood risk assessment would be set out as a Level 2 SFRA and site specific plans would need to be provided, with the information illustrating the variation of flooding and likely performance of flood risk management infrastructure necessary to ensure that development would be safe for its lifetime.* The Level 2 SFRA is required before the site specific Flood Risk Assessment is produced as it is required to inform the Sequential Test to steer development to the areas at the lowest risk of flooding. The Sequential Test document submitted is therefore invalid in its current form as it is based on out of date data. To ensure the proposed sites and areas are acceptable in principle we require a level 2 assessment of the allocated sites/areas proposed in Flood Zone 2 and 3. This will ensure flood risk at the sites and areas has been adequately assessed and can pass the exceptions test.
13.2	Appendix 2	Area Profiles	<u>Modifications</u> It is stated within the Appendix 2 area profiles that site-specific FRAs considering the impacts of future flood risk using the 2016 climate change allowances should be

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			undertaken for each site. Although we are pleased the correct climate change allowances have been acknowledged, we are still concerned about the challenges future flood risk could pose to the allocated sites if it fails to be considered at this essential planning stage. For example, based on the 2008 SFRA it may appear that a site has enough space outside of the 1 in 100yr fluvial flood extent to accommodate all development, but once future flood risk and the impacts of climate change are taken into account this could significantly reduce the amount of low flood risk land available to be built on. As a result, it will then be necessary to build within the 1 in 100yr + climate change flood extent, for which it is required that flood storage compensation be provided on a level-for-level and volume-for-volume basis, but the ability of the development to go ahead will depend on the availability of space within which the necessary flood storage compensation can be provided. It is important for there to be an understanding of future flood risk at an early stage to ensure that it won't be a barrier to development coming forward within the allocated sites/areas. Therefore we strongly advise that the Sequential Test be reapplied to sufficiently take into account future flood risk. We have identified in the table below the key sites that need to be reassessed and the Sequential Test reapplied. The following sites have incorrect Flood Zones identified: **LLDC1-HC Bartrip Street** 2008 SFRA identifies the site as being within Flood Zone 2 only. However, both Flood Zone 2 and 3 encroach on the south of the site to a similar extent. Therefore, this site needs to be revisited to ensure that the most up to date flood risk information is being used. The Sequential Test should also be revisited based on this up to date information. **LLDC2-HC Chapman Road (Palace Close**) 2008 SFRA identifies the site as being within Flood Zone 2 only. However, the majority of the site is covered by Flood Zone 3.

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			Based on the Flood Zone 3 extent it will be unlikely that all development can be accommodated outside this Zone. Furthermore, if there needs to be any increase in built footprint within Flood Zone 3 then it is likely to be a challenge to find a way of providing level for level and volume for volume flood storage compensation. Therefore, this site needs to be revisited to ensure that the most up to date flood risk information is being used. The Sequential Test should also be reapplied based on this up to date information. **A19-HR Brantwood Road** 2008 SFRA identifies the site as being within Flood Zone 2. Although the site does not fall within the current Flood Zone 3, out detailed fluvial flood modelling shows that the site would be affected in the 1 in 100yr + 20% climate change flood, which the 2008 SFRA does not demonstrate. 20% climate change is a lower allowance than what we would require to be considered for this type of development, so we can assume that once appropriate climate change allowance (35%) has been taken into consideration a larger area of the site will be affected. Flood risk should be taken into account for the lifetime of the proposed development. Any increase in built footprint within 1 in 100yr + climate change extent will need to be compensated for on a level for level and volume for volume basis. If this cannot be achieved then such a development would fail to meet the requirement of Paragraph 155 of the NPPF which states that where development is necessary in flood risk areas 'it should be made safe for its lifetime without increasing flood risk elsewhere'. Therefore, this site needs to be revisited to ensure that the most up to date flood risk information is being used. The Sequential Test should also be reapplied based on this up to date information.

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			A22-HR Friern Barnet Sewage Works/Pinkham Way 2008 SFRA identifies the site as being within Flood Zone 2 only. However, both Flood Zone 2 and 3 are expected to encroach on the northern section of the development. Therefore, this site needs to be revisited to ensure that the most up to date flood risk information is being used. The Sequential Test should also be reapplied based on this up to date information. **A24-WF Argall Avenue** Although the 2008 AFRA correctly identifies that the site is affected by Flood Zone 2 and 3, we have concerns that the site is almost entirely covered by Flood Zone 2 and a large section of it also falls within Flood Zone 3. Furthermore, the 2008 SFRA has not identified that the site is also within our modelled 1 in 100yr + climate change flood extent, which can be expected to increase once the correct climate change allowance has been taken into consideration. Flood risk should be taken into account for the lifetime of the proposed development. Any increase in built footprint within 1 in 100yr + climate change extent will need to be compensated for on a level for level and volume for volume basis. If this cannot be achieved then such a development would fail to meet the requirement of Paragraph 155 of the NPPF which states that where development is necessary in flood risk areas 'it should be made safe for its lifetime without increasing flood risk elsewhere'. Therefore, this site needs to be revisited to ensure that the most up to date flood risk information is being used. The Sequential Test should also be reapplied based on this up to date information. **LLDC3-WF Temple Mill Lane**

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			Although the 2008 AFRA correctly identifies that the site is affected by Flood Zone 2 and 3, it fails to identify that the site is also within our modelled 1 in 100yr + climate change flood extent, which can be expected to increase once the correct climate change allowance has been taken into consideration. It is extremely disappointing that our 2015 comments on the Regulation 18 consultation have not been taken into consideration regarding updating the evidence base. The modification and way forward we have identified would be a detailed review of the flood risk data available, to identify what the best available data currently is and where the implications of climate change on future flood risk have already been appropriately assessed. For the key sites highlighted above, any data gaps should look to be filled and the Sequential Test reapplied to ensure that the allocated sites remain appropriate. A Level 2 assessment of the allocated sites and areas proposed in Flood Zone 2 and 3 would ensure that flood risk at these sites and areas had been adequately assessed and can pass the exceptions test. With the correct evidence base and using the 2016 climate change allowances we would no longer find the plan unsound under the basis of not being justified. If the Sequential Test was also using the up to date data reflecting and identifying the correct flood zones and modelling based on an up to date Level 2 SFRA it would be meeting the requirements under the NPPF and it would no longer be a soundness issue of not being consistent with national planning policy. <u>Participation at oral examination</u> We would consider it necessary to participate in the oral examination to outline our reasoning behind finding the plan unsound as it does not currently meet the tests of being *Justified* or *Consistent with National Planning Policy*. We have concerns over flood risk data from 2008 and 2011 being used to allocate waste sites and areas when more up to date data with climate change allowances is available (dated 2016). Without this evidence base the plan is not in line with paragraph 31 and 157 of the NPPF. Several of the sites have been identified in the incorrect flood zones. If the modifications we have outlined

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			above to use the most up to date data to assess future flood risk and to base the Sequential Test on an adequate SFRA to allocate suitable waste sites and areas are not taken into account our position finding the plan unsound will remain.
13.3	9	P5	**The following are points of accuracy and clarity, where we are suggesting an improvement but we do not think the matter makes the document unsound.** We have concerns that the current Policy 5b requiring building enclosure does not have as much weight as required and doesn't reflect Best Available Techniques for the requirement of building enclosure or the policies in the London Environment Strategy and the London Plan (Policy SI84d). We have provided modified text that would address this as outlined in the next section 7. We also have suggested additions to paragraphs 9.34, 9.40 and 9.68 to have more stringent policies on human health which fit in with draft London Plan POL SI1 on Air Quality Neutral and Pol GG3(healthy city). We also have suggested additions regarding the use of railway sidings which does not preclude activities to operate without consideration for causing pollution. In addition impact on human health could be incorporated into the Strategic Objectives which would help promote the health aspect of air quality. <u>Modifications</u> We request the current wording for policy 5b as below: *"b) the facility will be enclosed unless justification can be provided by the developer as to why that is not necessary;"* be amended to the following:

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			"b) the facility will be enclosed unless justification can be provided by the developer ***that an equivalent level of protection can be permanently achieved by other means****."* We also suggest the following amendment to Paragraph 9.34 which currently reads: *"Policy 5 seeks to ensure that the construction and operation of waste facilities does not give rise to an unacceptable impact, or harm the amenity of local residents or the environment. Amenity is defined as any element providing positive attributes to the local area and its residents and impacts can include such issues as increased noise disturbance, light impacts including increased light or reduced light or sunlight, reduced privacy, loss of outlook and reduced visual amenity. Applicants will need to demonstrate that appropriate measures have been taken to minimise any potential impacts from the proposed waste development to ensure the protection of local amenity..."* be modified to read: *" Policy 5 seeks to ensure that the construction and operation of waste facilities does not give rise to an unacceptable impact* ***on health****, or harm the amenity of local residents or the environment. Amenity is defined as any element providing positive attributes to the local area and its residents and impacts can include such issues as, but not limited to,* ***increased levels of local air pollution,*** *increased noise disturbance, light impacts including increased light or reduced light or sunlight, reduced privacy, loss of outlook and reduced visual amenity. Applicants will need to demonstrate that appropriate measures* ***and or Best Available Techniques (BAT) (where applicable)*** *have been taken to minimise any potential impacts from the proposed waste development to ensure the protection of local amenity* ***and health****…."* In addition due to the fact that railway sidings moving inert wastes causing dust nuisance and relying on the 'strength' of using an alternative to road transport we would like an

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			addition to this paragraph which does not preclude railway siding activities to operate without consideration for causing pollution or amenity effects. Paragraph 9.40 currently reads: *"Developers are required to demonstrate that they have considered the potential to use water and rail to transport waste before reliance on transport of waste by road. Where the site lies adjacent to a wharf or waterway, capable of transporting waste, developers need to demonstrate that consideration has been given to the provision and/or enhancement of wharf facilities…"* And we request the following be added: ***'Waste transfer activities that do take advantage of rail and or boat transportation must also ensure that they design their site and meet the standards required by all waste management sites stated in this Plan'.*** Paragraph 9.68 should make mention of sites and operators conforming to the 'Aggregates from inert waste Quality Protocol' document to achieve end of waste status. We are disappointed that the paragraph makes no mention of this and reads as if sites and or operators can just re-use waste in engineering projects and the like to avoid disposal to landfill, out of context. It should also state that there is no end of waste criteria for soil so this will always be viewed as a waste once it has become a controlled waste and that reference should be made to the 'definition of waste' by sites and or operators. In addition impact on human health could be incorporated into the Strategic Objectives SO4 on page 18: *To ensure that all waste developments meet high standards of design and build quality, and that the construction and operation of waste management facilities do not cause unacceptable harm to the **health or** amenity of local residents or the environment.*
13.4	5 and 6	all	**The following are points of accuracy and clarity, where we are suggesting an improvement but we do not think the matter makes the document unsound.**

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			In the site reports Waste Data Study part 3 Appendices 4 documents for each Borough it appears that none of the sites have been visited since August 2013. The assessments of some of the sites may be out of date due to changes to the nature of the surrounding developments. The Waste Data studies generally seem to rely heavily on the use of the Waste Data Interrogators (WDI). It should be noted that the WDI is not comprehensive for all sites that receive waste – the WDI in particular does not include most of the 'PPC' regulated sites, which includes the incinerators and some sites handling hazardous wastes - you should be using the full range of available data that we publish plus requesting the returns data for sites not covered on the WDI and the incinerators data to be more comprehensive. This means that the total amount of waste estimated - in Data Study Part 1 January 2019 p60; 9. Cross Boundary Movements – to be deposited in the NLWP area (Table 27) is under estimated by around 300,000 tonnes (this is just under 10% of the overall amount received including waste incinerated). The amount of waste exported is also likely to be underestimated for similar reasons if using the WDI. It is not clear whether the figure for exports includes waste destined for incineration outside of the NLWP area. The reference to the interrogators suggests that it isn't as this data is not included in the WDI. <u>Modifications</u> The data studies would be improved by using all of the available data. The figures in the tables should therefore be regarded as minimum figures or estimates rather than an absolute number. It should be clearer that the figures are estimates. The latest (2017) version of the Waste Data Interrogator is more comprehensive than the 2016 version with respect to the 'data gaps' issue.

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			Some sites have had their permits changed in recent years to PPC permits, this also explains why some of the site assessments state that data is 'not available' for 2016. It is available but on request from the Environment Agency.
13.5	9	Policy 8	Regarding Policy 8, better alignment with the approach being developed in the new London Plan regarding inert materials should be used, we are requesting further clarity outlined in the next section 7. <u>Modifications</u> With Policy 8 – we suggest clearer definition of the beneficial use of materials (and therefore what is a 'recovery' operation). The GLA's definition may include some activities that we as the Environment Agency would classify as 'disposal' and this therefore needs to be clearly stated. This would then align the plan with the approach being developed in the new London Plan regarding inert materials.

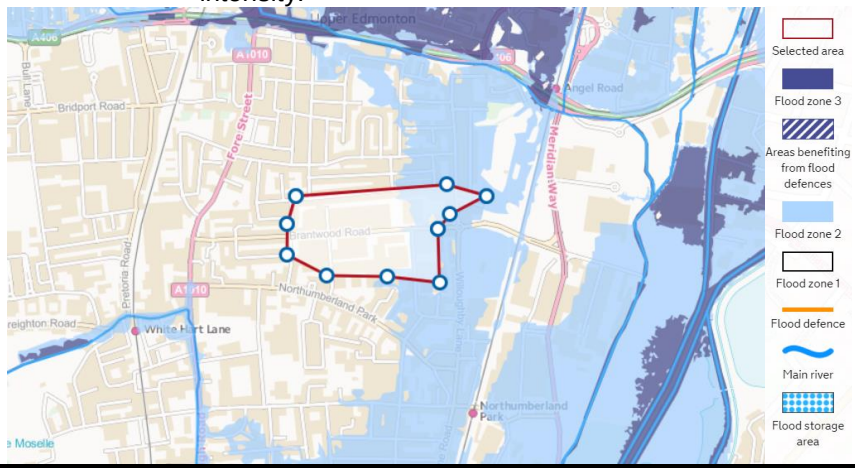
Appendix B: Proposed Modifications

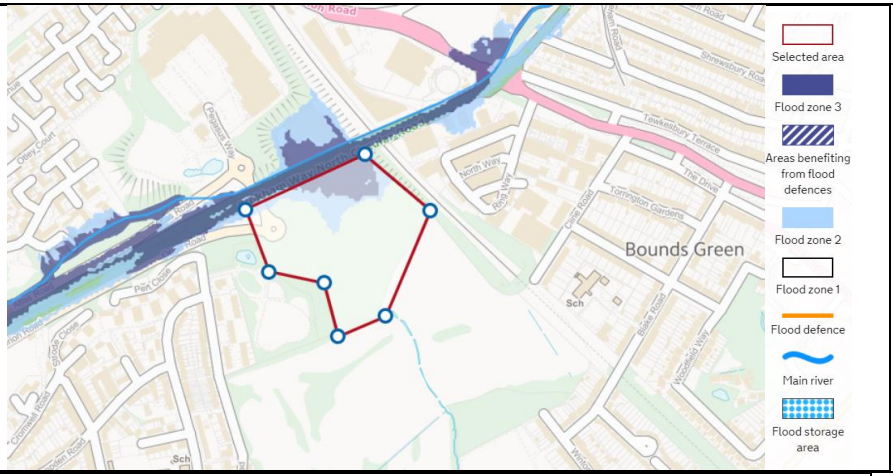
Section	Proposed change	Justification
3.4	SO4. To ensure that all waste developments meet high standards of design and build quality, and that the construction and operation of waste management facilities do not cause unacceptable harm to the health or amenity of local residents or the environment:	Environment Agency Rep 13-3/5
P5b	**Policy 5: Assessment Criteria for waste management facilities and related developmer** Applications for waste management facilities and related development, including those replacing or expanding existing sites, will be required to demonstrate to the satisfaction of the relevant Borough that: b) the facility will be enclosed unless justification can be provided by the developer ~~as to why that is not necessary~~ that an equivalent level of protection can be permanently achieved by other means.	Environment Agency Rep 13-3/5
P5m	~~5m) appropriate permits are held or have been applied for from the Environment Agency~~	
9.34	Policy 5 seeks to ensure that the construction and operation of waste facilities does not give rise to an unacceptable impact on health, or harm the **amenity** of local residents or the environment. Amenity is defined as any element providing positive attributes to the local area and its residents and impacts can include such issues as, but not limited to, increased levels of local air pollution, increased noise disturbance, light impacts including increased light or reduced light or sunlight, reduced privacy, loss of outlook and reduced visual amenity. Applicants will need to demonstrate that appropriate measures and/or Best Available Techniques (BAT) (where applicable) have been taken to minimise any potential impacts from the proposed waste development to ensure the protection of local amenity and health. The specific requirements will vary from site to site, however issues to be addressed may include strict hours of operation, effective cladding on buildings to prevent noise pollution, and dust and odour suppression systems as appropriate. These issues are discussed in more detail below.	Environment Agency Rep 13-3/5

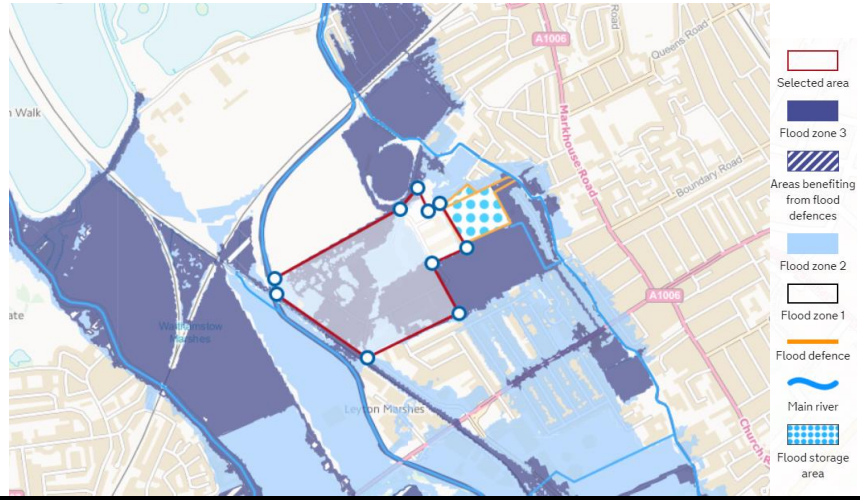
9.40	[…] Developers are required to demonstrate that they have considered the potential to use water and rail to transport waste before reliance on transport of waste by road. Where the site lies adjacent to a wharf or waterway, capable of transporting waste, developers need to demonstrate that consideration has been given to the provision and/or enhancement of wharf facilities. Waste transfer activities that do take advantage of rail and or boat transportation must also ensure that they design their site and meet the standards required by all waste management sites stated in this Plan.	Environment Agency Rep 13-3/5
9.48	The North London Strategic Flood Risk Assessment (SFRA) and individual borough 'Level 2' SFRAs have demonstrated the current risks from **flooding** from various sources across North London and site specific flooding assessments have been undertaken on new sites/areas in schedules 2and 3. Where a site is near or adjacent to areas of flood risk, the development is expected to contribute through design to a reduction in flood risk in line with the NPPG. Development proposals will be required to assess the impact of climate change using the latest published climate change allowances, and mitigate to the appropriate future flooding scenario using these allowances. . A sequential approach to the layout of the site should be taken aiming to locate development in the parts of the site at lowest risk of flooding. Waste facilities are often characterised by large areas of hardstanding for vehicles and large roof areas. Development proposals will be required to show that flood risk would not be increased as part of the scheme and, where possible, will be reduced overall through the use of Sustainable Drainage Systems (SuDS) and other techniques. Any proposed development should be reviewed by the Environment Agency at an early stage to discuss the reduction of flood risk on the site.	Environment Agency Rep 13-1/5
9.49	~~Developers of waste facilities should at the time they submit their planning application be engaged with the Environment Agency and hold or be in the process of applying for appropriate **permits from the Environment Agency** as the contemporaneous~~	

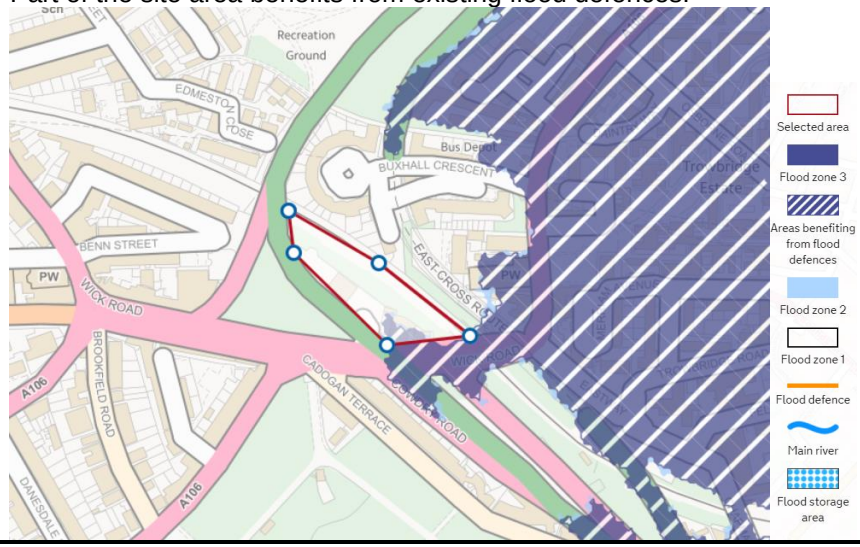
	~~consideration of planning and environmental permit enables the application to be considered in the round.~~	
Policy 8	**Policy 8: Control of Inert Waste** Inert waste should be managed as far up the waste hierarchy as possible, including on-site recycling and reuse of such material. Proposals for development using inert waste will be permitted where the proposal is for beneficial use, including but not limited to: ~~both essential for, and involves the minimum quantity of waste necessary for:~~ a) ~~The purposes of r~~ Restoring former mineral working sites; or b) Facilitating an improvement in the quality of land; or c) Facilitating the establishment of an appropriate use in line with other policies in the Local Plan; or d) Improving land damaged or degraded as a result of existing uses and where no other satisfactory means exist to secure the necessary improvement. ~~Where one or more of the above criteria (a-d) are met, a~~ All proposals using inert waste should: a) Incorporate finished levels that are compatible with the surrounding landscape. The finished levels should be the minimum required to ensure satisfactory restoration of the land for an agreed after-use; and b) Include proposals for high quality restoration and aftercare of the site, taking account of the opportunities for enhancing the overall quality of the environment and the wider benefits that the site may offer, including biodiversity enhancement, geological conservation and increased public accessibility.	Environment Agency Rep 13-5/5

	Proposals for inert waste disposal to land will not be permitted if it can be demonstrated that the waste can be managed through recovery operations ~~and that there is a need to dispose of waste~~.		
9.68	Inert waste materials ~~can~~ should be used for beneficial purposes, such as the restoration of mineral sites and in engineering works, or at other 'exempt sites' rather than disposed of at inert landfill sites. A definition of 'beneficial uses' can be found in the new London Plan. Increased use of recycled and secondary aggregates can reduce the need and demand for primary aggregates extraction. Sites and operators will need to conform to the 'Aggregates from inert waste Quality Protocol' document to achieve 'end of waste' status. If this cannot be achieved and/or the operator cannot prove compliance with the protocol, then the material will not have achieved 'end of waste' status and will still be considered a waste and subject to controlled waste legislation. There is no 'end of waste' criteria for soil so this will always be viewed as a waste once it has become a controlled waste outside of the Definition of Waste Code of Practice.		Environment Agency Rep 13-5/5
Area Profiles - A19-HR Brantwood Road	Flood Risk	The site area is largely Flood Zone 1 with the western most part of the site area falling partially within Flood Zone 2. The site area is considered suitable for the proposed "Less Vulnerable" developments. It is therefore considered that the site area should pass the sequential test. The exception test would not be applicable. Note that the site area may also be suitable for "More Vulnerable" developments, as this would pass the sequential test. The exception test would not be applicable. The site area is shown to flood from the Pymmes Brook in the 0.1% AEP event (without defences) and this will increase with the future 1% AEP event to cover approximately one quarter of the site area. A flood risk assessment would be required for any redevelopment. This will need to incorporate the following climate change allowances into the assessment: • Use central (25% increase from 2070 to 2115) for peak river flow.	Environment Agency requirement (Rep 13-2/5)

		• Use central (20% increase from 2070 to 2115) and upper end (40% increase from 2070 to 2115) for peak rainfall intensity.  	
Area Profiles - A22-HR Friern Barnet Sewage Works/Pinkham Way	Flood Risk	The site area is largely within Flood Zone 1 with a small area to the north of the site area falling partially within Flood Zones 2 and 3. It is considered that the site area would be suitable for the proposed “Less Vulnerable” developments. It is therefore considered that the site area should pass the sequential test. The exception test would not be applicable. The site area is shown to flood from the Bounds Green Brook in the 1% AEP event (without defences) and this will potentially increase with the future with 1% AEP event covering a greater extent of the site area. A flood risk assessment would be required for any redevelopment. This will need to incorporate the following climate change allowances into the assessment: • Use central (25% increase from 2070 to 2115) for peak river flow. • Use central (20% increase from 2070 to 2115) and upper end (40% increase from 2070 to 2115) for peak rainfall intensity.	Environment Agency (Rep 13-2/5)

				
Area Profiles - A24-WF Argall Avenue	Flood Risk	The site area falls partially within Flood Zone 1, Flood Zone 2 and Flood Zone 3. It is considered that the site area would be suitable for the proposed "Less Vulnerable" developments and should pass the sequential test, however it may be sequentially less preferable than other site areas listed based on the proportions of Flood Zone 1, 2 and 3. The exception test would not be applicable. However, development should be avoided on the part of the site area which lies within the functional floodplain. The site area is shown to flood from the River Lee and Dagenham Brook in the 1% AEP event (without defences) and this will potentially increase with the future with 1% AEP event covering a greater extent of the site area. A flood risk assessment would be required for any redevelopment. This will need to incorporate the following climate change allowances into the assessment: • Use central (25% increase from 2070 to 2115) and higher central (35% increase from 2070 to 2115) for peak river flow. • Use central (20% increase from 2070 to 2115) and upper end (40% increase from 2070 to 2115) for peak rainfall intensity.		Environment Agency (Rep 13-2/5)

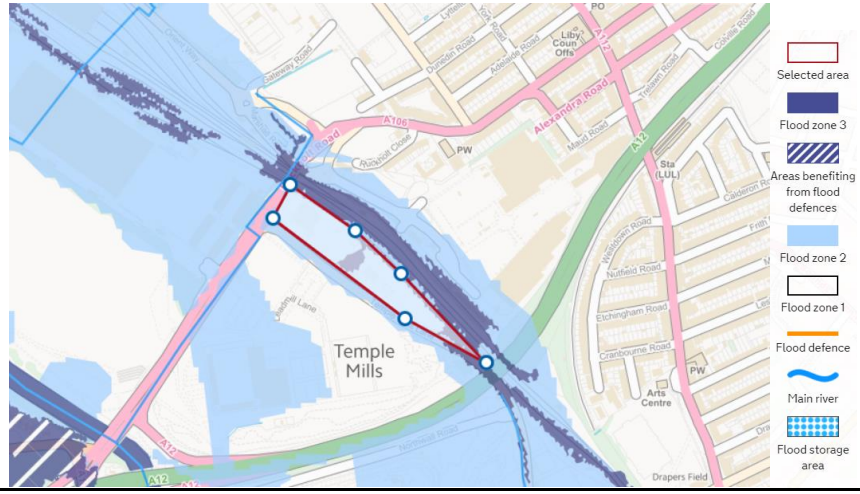
		For any proposed development which involves an increase in built footprint within the modelled extent of the 1 in 100 chance in any year flood event, taking the impacts of climate change into account, or where the footprint has been moved into a deeper area of floodplain than the existing built footprint, floodplain compensation will need to be provided on a volume-for-volume and level-for-level basis.  		
Area Profiles - LLDC1-HC Bartrip Street	Flood Risk	The site area is largely within Flood Zone 1 with the southern most part falling partially within Flood Zones 2 and 3, noting that the Flood Zone 3 is within an area benefiting from defence. The site area would be suitable for the proposed “Less Vulnerable” developments. It is therefore considered that the site area should pass the sequential test. The exception test would not be applicable. The site area is shown to flood from the River Lea / Lee Navigation in the 1% AEP event (without defences) and this will potentially increase with the future with 1% AEP event covering a greater extent of the site. The River Lea / Lee Navigation benefits from defences and a site-specific flood risk assessment should consider how much these benefit the site area.		Environment Agency (Rep 13-2/5)

		A flood risk assessment would be required for any redevelopment. This will need to incorporate the following climate change allowances into the assessment: • Use central (25% increase from 2070 to 2115) for peak river flow. • Use central (20% increase from 2070 to 2115) and upper end (40% increase from 2070 to 2115) for peak rainfall intensity. Part of the site area benefits from existing flood defences. 	
Area Profiles - LLDC2-HC Chapman Road (Palace Close)	Flood Risk	The site area falls partially within Flood Zone 1 and 2 but is largely in Flood Zone 3, noting that this is within an area benefiting from defences. The site area would be suitable for the proposed “Less Vulnerable” developments, however it may be sequentially less preferable than other site areas listed based on the proportions of Flood Zone 1, 2 and 3 and the residual risk to the site area. It is therefore considered that the site area should pass the sequential test. The exception test would not be applicable. The site area is shown to flood from the River Lea / Lee Navigation in the 1% AEP event (without defences) and this will potentially increase with the future with 1% AEP event covering a greater extent of the site area.	Environment Agency (Rep 13-2/5)

			The River Lea / Lee Navigation benefits from defences and a site-specific flood risk assessment should consider how much these benefit the site area. A flood risk assessment would be required for any redevelopment. This will need to incorporate the following climate change allowances into the assessment: • Use central (25% increase from 2070 to 2115) for peak river flow. • Use central (20% increase from 2070 to 2115) and upper end (40% increase from 2070 to 2115) for peak rainfall intensity. The majority of the site area benefits from existing flood defence. 	
Area Profiles - LLDC3-WF Temple Mill Lane	Flood Risk	The site area is largely Flood Zone 2 with a small area of Flood Zone3. It is therefore considered that the site area would be suitable for the proposed “Less Vulnerable” developments and should pass the sequential test. The exception test would not be applicable. The site area is shown to flood from the River Lee and Dagenham Brook in the 1% AEP event (without defences) and this will potentially		Environment Agency (Rep 13-2/5)

increase with the future with 1% AEP event covering a greater extent of the site area.

A flood risk assessment would be required for any redevelopment. This will need to incorporate the following climate change allowances into the assessment:

- Use central (25% increase from 2070 to 2115) and higher central (35% increase from 2070 to 2115) for peak river flow.
- Use central (20% increase from 2070 to 2115) and upper end (40% increase from 2070 to 2115) for peak rainfall intensity.

For any proposed development which involves an increase in built footprint within the modelled extent of the 1 in 100 chance in any year flood event, taking the impacts of climate change into account, or where the footprint has been moved into a deeper area of floodplain than the existing built footprint, floodplain compensation will need to be provided on a volume-for-volume and level-for-level basis.