**Bromley by Bow South: Non-Technical Summary**

**Introduction**

1. AECOM Infrastructure and Environment UK Ltd (AECOM) have been instructed by Danescroft Land Ltd, on behalf of the group of landowners (Danescroft Land Ltd, Lindhill Properties Ltd, British Land PLC, Vastint Holding B.V, Southern Housing Group, London Legacy Development Corporation (LLDC)), to undertake environmental assessment work in relation to the redevelopment of the Bromley by Bow (South) site (herein referred to as ‘the Site’), allocated as Sub Area 4.1 of the LLDC Local Plan 2015 to 2031 (Ref. 1).

2. It is the intention of the landowners to submit an illustrative masterplan to the Planning and Policy Decisions Team (PPDT) of the LLDC. AECOM have produced a suite of Environmental Impact Topic Reports testing the illustrative masterplan, the outcome of which is summarised within this Non-Technical Summary (NTS).

3. The Environmental Impact Topic Reports have been produced to form a separate evidence base identifying any potential significant environmental effects of the operation of the maximum extents/parameters of the illustrative masterplan, and where further work might be required to support a planning application for development of the Site, or any part thereof.

4. Both the illustrative masterplan and Environmental Impact Topic Reports have provided the basis upon which a series of redevelopment parameters and design guidelines have been developed for the Site. It is the intention that these parameters and guidelines will be adopted as a Supplementary Planning Document (SPD) for the Site. Both the illustrative masterplan and Environmental Impact Topic Reports will be appended to the SPD.

**Site Description**

5. The Site, as shown in Figure 1, is approximately 6ha in size and is broadly triangular in shape. It currently accommodates the Tesco Bromley by Bow Superstore (and associated car parking) and Petrol Filling Station which lies within the centre of the Site, and is accessed via Three Mill Lane and Hancock Road. In addition, there are industrial and distribution activities on-site, and vacant land and buildings associated with the existing land uses. Situated off Otis Street is Paisa Bar and Nightclub. There are a number car parks onsite, associated with each office / retail space.

6. The Site is bordered to the east by the River Lea, to the south by the over-ground railway line, to the west by the A12 and to the north by industrial and commercial land. The Bromley-by-Bow London Underground Tube Station (providing access to the District and Hammersmith & City lines) is located to the south-west of the Site, on the other side of the A12. The Three Mills Conservation Area is located directly to the east of the Site and encompasses the south-eastern (river-side) and southern fringes of the Site (adjacent to the Three Mills Lane Bridge). This Conservation Area includes a number of heritage assets including the Grade I Listed Tide Mill.

7. The Site lies within the jurisdiction of the LLDC. The area directly to the east of the Site lies within the London Borough of Newham (LBN) and the area to the west lies within the London Borough of Tower Hamlets (LBTH).

**Planning History**

8. In July 2010, hybrid planning permission (with some elements approved in detail) was granted for the Tesco application (PA/09/02574) by the Greater London Authority (GLA) for a mixed-use development, including a District Centre and a superstore. The area covered by this permission sits entirely within the Site.

9. In addition, in July 2012, hybrid planning permission (with detailed planning permission for Phase 1) was granted for the Bow River Village planning application (PA/11/02423) by the GLA for a residential led mixed-use development. The Bow River Village site comprises the area directly to the north of the Site, and includes the northern most portion of the Site.
Figure 1: Site Location
The Illustrative Masterplan

10. The illustrative masterplan comprises the following uses and quantum of development, in a range of buildings up to 25 storeys in height:

- 1,690 residential units;
- 4,160m² gross internal area (GIA) workspace;
- 2,324m² GIA retail (excluding the new Tesco store);
- 1,341m² GIA retail store (Tesco);
- 727m² GIA social infrastructure;
- 2,844m² GIA primary school;
- Energy centre;
- Parking; and
- Public open space, public realm, communal courtyards and play areas.

11. The illustrative ground floor plan produced by Karakusevic Carson Architects (KCA) is provided in Figure 2.
The Assessment Process and Environmental Reporting

Approach to the Methodology

12. The purpose of the illustrative masterplan is to provide the basis upon which a series of redevelopment parameters can be defined for the Site (i.e. defining what can be built out on the Site, rather than how it will be delivered) and to establish acceptable levels of environmental impact associated with a defined scheme for the Site (the illustrative masterplan). For this reason, the Environmental Impact Topic Reports have focussed on the potential operational impacts only, as the
purpose of the exercise was to identify any issues that would require further consideration at a later
design/planning application stage with regards to designing out any potential significant environmental
effects, where possible.

13. It is acknowledged that potential demolition and construction related effects will need to be considered
for each planning application for redevelopment of the Site or any part thereof, and will need to
consider the management measures set out in the GLA's Sustainable Design and Construction
Supplementary Planning Guidance (SPG) (2014) (Ref. 2) and the Control of Dust and Emissions
during Construction and Demolition SPG (July 2014) (Ref. 3).

Approach to Determining the Baseline Conditions

14. Each of the Environmental Impact Topic Reports set out the baseline conditions present at the Site
and surrounding area where relevant, based on current conditions. This review has been based on
policy reviews, desk studies and site surveys, where appropriate.

Assessment of Effects and Mitigation

15. For each Environmental Impact Topic Report, the significance of likely effects arising from the
illustrative masterplan have been evaluated with reference to definitive standards, accepted criteria
and legislation where available. Where it has not been possible to quantify impacts, qualitative
assessments have been undertaken based on expert opinion and professional judgement. Any
assumptions and limitations which have been made within the assessment have been noted where
relevant within the reports.

16. Specific criteria for the assessment of significance of effects for each technical topic has been based
on the following:

- Extent and magnitude of the impact (i.e. the change);
- Impact nature (whether direct, indirect, reversible or irreversible);
- Whether the impact occurs in isolation, is cumulative or interactive;
- Performance against any relevant environmental quality standards;
- Sensitivity of the receptor;
- Environmental design and management measures;
- Availability of mitigation measures to either eliminate or reduce adverse impacts. These should
  be incorporated into the SPD where appropriate, and taken forward into the detailed design
  associated with any planning application/s to be made for the Site, or any part thereof;
- Compatibility with environmental policies; and
- Classification of the resultant environmental effect.

17. In order to provide a consistent approach across the different technical disciplines addressed within
the Environmental Impact Topic Reports, for the most part the terms High, Medium, Low and Very Low
have been used to describe the sensitivity of resources / receptors. The terminology to be used to
describe the magnitude of impacts within the reports is High, Medium, Low and Very Low.

18. For the most part, potential effects have been described as:

- Adverse – detrimental or negative impacts to an environmental resource or receptor; or
- Beneficial – advantageous or positive impact to an environmental resource or receptor; and
- Major, moderate, minor or negligible.

19. Following classification of an effect using the above methodology, the Environmental Impact Topic
Reports provide a clear statement as to whether the effect is significant or not significant. As a general
rule, major and moderate effects are considered to be significant, whilst minor and negligible effects
are considered to be not significant. However, professional judgement will also be applied, including
taking account of whether the effect is permanent or temporary, its duration / frequency and / or its
likelihood.
20. Where there are adverse effects, additional mitigation measures and further considerations have, where possible, been set-out for the later detailed design stage associated with any future planning application/s for the Site, or any part thereof.

Environmental Scoping and Consultation

21. AECOM submitted a Scoping Opinion request to the LLDC PPDT setting out the proposed approach, methodology and scope of the Environmental Impact Topic Reports, and the list of committed developments to be considered in the assessments of cumulative effects, on the 10th March 2016. The LLDC PPDT did not request any changes to the approach set out in the Scoping Opinion Request.

22. Subsequent to the submission of the Scoping Opinion Request, and a further review of the committed developments in the area, those currently under construction are taken to be in the baseline scenario (rather than assessed cumulatively) as these developments are likely to be completed and occupied prior to any works for the redevelopment of the Site getting underway. Figure 3 shows the committed developments considered within the Environmental Impact Topic Reports.

Planning Policy Context

23. The environmental assessment of the illustrative masterplan for the Site has been undertaken and prepared with regards to relevant national, regional and local planning policy. At the national level, the key planning policy document is the National Planning Policy Framework (NPPF) (2012) (Ref. 4) which broadly sets out the Government’s vision of sustainable development, which is to be interpreted and applied locally to meet local development aspirations.

24. At the regional level, the planning strategy for London is set out within the London Plan: Spatial Development Strategy for London Consolidated with Alterations Since 2011 (March 2015) (Ref. 5) and Minor Alterations to the London Plan (2015) (Ref. 6).

25. At the local level, consideration has been given to the LLDC Local Plan 2015 to 2031 (Ref. 1) which is the principal document of the Local Development Framework and which allocates the Site for redevelopment within Sub Area 4.1.

Sensitive Receptors

26. As described in the Introduction section, the Three Mills Conservation Area is located directly to the east of the Site. The Site itself does not contain any listed buildings or nationally designated (protected) heritage assets such as scheduled monuments or registered parks and gardens and is not located within a Conservation Area. The Site is not located in an area designated for ecological value; however, the Site is located directly adjacent to an area in the east which is designated as a Site of Special Scientific Interest Impact Zone.

27. The Site lies adjacent to the River Lea and as such, there are areas within the Site which lie within Environment Agency (EA) Flood Zone 2 and 3. Areas of the Site which lie within these zones are protected as part of river flood defences along the River Lea.

28. Potential sensitive receptors to any redevelopment at the Site are anticipated to include the following:

- Employment provision on the Site;
- Existing community and social infrastructure;
- Users of the River Lea (including the occupants of the canal boats moored along the banks);
- Three Mills Conservation Area and associated Listed Buildings;
- Existing and future residential properties in the locality, including those currently under construction to the north as part of the Bromley by Bow North/Bow River Village scheme; and
- Existing views to and from the Site (including from the Three Mills Conservation Area).
LEGEND

- Site Boundary
- Borough Boundary
- Cumulative Impacts

1: Cooks Road (14/00191/FUL)
2: Marshgate (14/00422/FUL)
3: 68-70 Stratford High Street (11/00609/FUMODA)
4: 80-92 Stratford High Street (09/00319/FUMODA)
5: 3-12 Stratford High Street (10/00319/FUMODA)
6: Pudding Mill Lane (PDZ8 LCS) (11/00621/OUTODA/PDZ8)
7: St Andrews Hospital (PA/08/1161)
8: Bow River Village (PA/11/02425) (Outside site boundary Only)
9: Strand East, Vastinct (12/00341/OUTOUT) (Outside site boundary Only)
10: Lock Keepers (PA/11/03641/A)

COMMITTED DEVELOPMENTS

BROMLEY-BY-BOW SOUTH

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Summary of Environmental Impact Topic Reports

Socio-Economics

29. The illustrative masterplan will have a number of beneficial impacts on the surrounding neighbourhoods. This includes the provision of employment opportunities, generated an estimated 184 net additional jobs once operational. The residents of private and intermediate units within the illustrative masterplan are estimated to increase expenditure in the local area by approximately £16.6m or £21.7m annually.

30. The illustrative masterplan will support a new 2 form entry Primary School, which will meet the additional requirements on primary school places in the local area resulting from the new residential population, while providing additional places for the existing resident population of the local area. The illustrative masterplan will also bring forward 21,482m² of open space, between 2,300m² to 3,500m² of retail floorspace, and provides on-site play space to meet the needs of the new resident population.

31. In addition to the positive impacts the illustrative masterplan will have on surrounding neighbourhoods and the wider area, the scale of the illustrative masterplan is likely to bring about ‘catalytic’ effects such as the creation of a better local physical and economic environment, which could in turn attract further investment to the area.

32. The assessment of cumulative effects in relation to socio-economics demonstrates that the illustrative masterplan, in combination with the committed schemes considered, would result in negligible to moderate beneficial cumulative effects. Based on the assumption that each committed scheme would mitigate against any adverse effect, the illustrative masterplan and committed scheme would have beneficial employment creation, office and retail provision, and additional local spending effects.

Noise and Vibration

33. The Site is bounded by significant noise sources at the south and west boundaries. To achieve suitable internal noise levels in the illustrative masterplan, significant mitigation measures will need to be incorporated into the detailed design of any future development proposals associated with a planning application for the Site, or any part thereof. Given that mitigation measures can be incorporated into the design, the Site is considered suitable for development in terms of noise.

34. Levels of vibration affecting the Site have been calculated using the highest measured vibration level. Daytime and night-time vibration levels due to train movements are of low enough magnitude that vibration mitigation is not necessary.

35. Ground-borne noise has been found to be of magnitude that may exceed recommended internal noise levels. Detailed calculations will need to be undertaken once detailed information on the foundation constructions of the buildings adjacent to the southern Site boundary is available. Should ground-borne vibration levels exceed internal noise levels, building isolation mitigation should be applied to affected buildings.

36. Consequently, given implementation of appropriate mitigation, the Site is considered suitable for development in terms of vibration.

37. The re-development of the Site will result in operational noise impacts due to changes in road traffic and fixed plant. The effect of these operational noise impacts is considered to be negligible.

38. In relation to committed schemes, it is expected that building services plant associated with each committed scheme will be designed to achieve operational noise limits at the nearest noise sensitive receptor. Therefore, it is considered that cumulative building plant services noise would be of negligible significance.

39. The change in road traffic noise levels associated with the committed schemes have been calculated and the resultant change in noise level is considered to be representative of the change in noise level that may be experienced at nearby noise sensitive receptors. Consequently, the cumulative road traffic noise effects would be of minor adverse significance.
Air Quality

40. LBTH have declared an Air Quality Management Area (AQMA) for the whole Borough. The AQMA was declared due to exceedences of the 24-hour mean particulate matter (PM$_{10}$) and annual mean nitrogen dioxide (NO$_2$) air quality objectives.

41. Atmospheric dispersion modelling has been used to model atmospheric emissions from road traffic (existing traffic, traffic from committed development and traffic arising from the illustrative masterplan) and the proposed on-site energy centre for the future baseline and with-development scenarios in 2026. Pollutant concentrations have been predicted at a number of existing, committed and future receptor locations.

42. Current annual mean nitrogen dioxide (NO$_2$) concentrations are above the objective value (40µg/m$^3$) in the area, primarily due to high levels of road traffic. Future baseline conditions indicate that NO$_2$ annual mean concentrations are above the objective value at all selected receptors included in the air quality assessment, due to baseline concentrations being close to the objective values in the study area, and the proximity to the busy A12.

43. Emissions from road traffic and the proposed CHP associated with the illustrative masterplan have been modelled with regards to the potential effect on existing air quality, both within the Site (at new residential receptors) and off-site, at existing and committed development receptors.

44. Air Quality statistics have been predicted for the future operational scenario at full operation considering both road traffic and energy centre emissions. Prediction of the with-development conditions has demonstrated that the illustrative masterplan would cause changes in local air quality ranging from imperceptible to medium at existing and committed receptors for the operational scenario. Changes of this magnitude are considered to result in negligible to moderate adverse effects, the latter of which is significant. These results are entirely due to the existing poor air quality in the area, arising from road traffic emissions. Any development of this Site and along the A12 corridor in the locality would create the same results with regards to air quality.

Ground Conditions

45. The ground conditions assessment identifies the significance of likely operational effects of the illustrative masterplan in relation to ground conditions of the Site, associated with potentially contaminated soils and groundwater, and provides mitigation measures and further considerations recommended for later detailed design associated with any future planning application/s for the Site.

46. Detailed site investigations and risk assessment will be required to better assess conditions beneath the Site and to inform the detailed design stage associated with any future planning application/s for the Site.

47. The commissioning of an Explosive Ordnance Threat desk study and assessment prior to further investigation, substantial excavation and piling works is recommended. The Explosive Ordnance Threat Assessment will provide recommendations for site specific mitigation measures and / or further works.

48. With regards to operational effects on ground conditions of the illustrative masterplan, these will be reduced to negligible through the implementation of mitigation measures during the demolition and construction phase of the redevelopment of the Site or any part thereof.

Water Resources, Drainage and Flood Risk

6.1 The risk of flooding from tidal and fluvial sources to the Site is considered to be low. The Site is designated Flood Zone 1 with the eastern part of the Site falling into Flood Zone 2. However, the definition of Flood Zone 2 across the eastern part of the Site is due to a historic flood event in 1947, prior to the development of the flood defence system along the Lower Lea Valley, rather than the current probability of flooding. The risk to the Site is therefore residual, in the event of a breach in the local flood defences. The chief flood risk posed to the Site is that from surface water flooding.

6.2 The following mitigation measures with regards to flood risk and drainage issues are recommended for consideration on the Site as part of any future planning application/s:

- An 8m setback zone from the edge of the flood defences must be retained;
- The current levels of the flood defences along the Site boundary should be surveyed and confirmed;
• For development to be considered appropriate at the Site, it will be necessary either to raise the
defences to the statutory level for the lifetime of the development, or demonstrate that it will be
possible to raise the defences in the future to meet the 6.2mAOD level for the year 2100;
• Any replacement of the hard (river wall) defences adjacent to the Site should be made with soft
defences to encourage biodiversity;
• Ideally, residential development should be located in areas of the Site designated Flood Zone 1, with
less sensitive development (i.e. retail, employment, public open space) directed towards the area of
Flood Zone 2;
• Finished floor levels for new development should be set at the standard level of 300mm above
ground level;
• Given the proximity to the River Lea Navigation, occupants of the Site should consider signing up the
Environment Agency Flood Warning Service;
• There may be a risk of groundwater flooding during construction of new buildings. Groundwater
levels should be monitored during construction to determine the risk of flooding and inform
appropriate mitigation during construction;
• Surface water should be attenuated on-site within feasible SuDS features constructed as an integral
part of the development; and
• Consideration of inclusions of green or brown roofs, permeable paving, rainwater harvesting systems
and rain gardens.

Archaeology

49. The Site lies within an Archaeological Priority Area (APA), and the archaeological importance of the
Site stems from the River Lea at the eastern boundary of the Site, which has the potential for
prehistoric and palaeoenvironmental remains. Due to the previous development of the Site there is
likely to have been significant disturbance to any archaeology within the Site.

50. Exclusion of basements from the illustrative masterplan minimises the impact on archaeological
resource. The restoration and retention of the sites relationship with the River is key as developmen
t of the Site comes forward through detailed design and corresponding planning applications. Although
this will not reduce any physical impacts to the archaeological resource, the setting of the surrounding
archaeology, both standing and buried along with the setting of the APA will be preserved and
enhanced by the reconnection of the Site with the River Lea.

51. Remnant features of historic interest are present within the Site, including relict elements of street
furniture, mooring points and cobbled floor surfaces. These elements could be used as touchstones
for future development of the Site and the retention of historic floor surfaces wherever possible would
give a unifying element to redevelopment of the Site as a whole.

52. There will be no effect on the archaeological resource during operation.

Ecology

53. The Site is currently of limited ecological value, as it is comprised mainly of buildings and
hardstanding. The adjacent River Lea Metropolitan Site of Importance for Nature Conservation (SINC)
is part of the Blue Ribbon Network of water ways. As such, it is an important ecological feature on the
local context and also in the context of the wider landscape.

54. The illustrative masterplan includes a several new areas of green space including parks, courtyards
and brown roofs. Along with any new areas of green space included in the masterplan for the adjacent
Bromley by Bow North development, these will help link the River Lee Metropolitan SINC and other
SINC sites within the proximity of the Site with the wider landscape, and help create a network of sites
of ecological value.

Arboriculture

55. The trees on Site are generally of low to moderate quality and are predominantly semi to early mature.
They provide both amenity and screening benefit to the immediate vicinity of the site and surrounding
land. The illustrative masterplan will substantially increase both the number and quality of trees on site
and provides an opportunity to increase the resilience and diversity of the local tree stock. It will also be possible to allow the retention of many of the most significant and highest quality trees which will ensure a continuity of tree cover for the site and will add maturity to the scheme.

**Wind Microclimate**

56. The pedestrian wind (microclimate) environment of the illustrative masterplan has been modelled in a wind tunnel test and areas for further consideration at the detailed design stage have been identified. The wind assessment has considered the suitability of areas for uses based on the Lawson Comfort Criteria.

57. Overall, the majority of locations in and around the Illustrative Masterplan are acceptable for their intended use and isolated locations experiencing windier than desired conditions may be mitigated with the measures such as implementation of soft or hard landscaping and use of solid balustrades.

58. It is recommended that at the detailed design phase, the Illustrative Masterplan should be wind tunnel tested to ensure that the wind microclimate is consistent with the finding of this report and assess balcony locations and any design changes made.

**Daylight and Sunlight**

59. The illustrative masterplan has been assessed in relation to daylight, sunlight and overshadowing impacts on the surrounding receptors. Whilst the majority of the impacts are identified as negligible to minor adverse and thus insignificant there are isolated instances of moderate to major adverse impacts. However, it should be noted that the Site is currently occupied by low level massing which does not present any significant obstruction to the daylight within the surrounding receptors. This therefore results in high existing daylight levels which are uncharacteristic of the urban location of the Site. Given the allocation of the Site as an opportunity area in the LLDC Local Plan and history of planning consents on the Site, it would be unrealistic for such high levels of daylight amenity to be maintained.

60. An appraisal has also been undertaken of the levels of daylight potential to be expected by future residential receptors, and overshadowing of the open spaces, within the illustrative masterplan.

61. Overall the illustrative masterplan performs well in terms of daylight potential, considering its location within an urban environment. Retail, commercial and office uses should be located where the daylight potential is lower - i.e. lower levels, close proximity to adjacent buildings - in order to allow the residential units, which have more restrictive daylight requirements, to benefit from a better daylight potential. The detailed design of the residential units, particularly on the lower floors and facing internal courtyards, should incorporate dual aspect layouts, larger windows and location of bedrooms in areas of lower daylight levels to prioritise daylight performance of the living areas.

62. The towers of the illustrative masterplan have been staggered and slightly rotated from their own axis to reduce the parallelism between the façades. This strategy consequently allows more daylight to reach each façade.

63. With regards to the open spaces within the illustrative masterplan, the majority of these areas at ground level receive good levels of sunlight. The riverside park extends westwards into the Site and here some of the area falls short of the BRE’s recommendation for overshadowing. However, this is a normal trend for amenity within such a dense environment and therefore it is in line with expectations. The overshadowing assessment of the roof level amenity space, although not performing as well as the main amenity areas at ground level (specifically in the central of the illustrative masterplan), are in line with similar developments in central London and therefore in line with expectations. Generally the roof level amenity spaces on the buildings along the southern Site boundary perform well.

**Townscape, Views and Built Heritage**

64. In overall terms, the Illustrative Masterplan is an example of a high quality masterplan, employing the principles of good urban design and encouraging permeability, legibility and the creation of a ‘place’ in the form of a new neighbourhood and local district centre.

65. The Site as existing is affected by many townscape constraints, including the almost impermeable A12 and the rail tracks; the river and the possible risk of flooding; the broken up urban grain of the Site; and consideration of the surrounding heritage assets, and the listed Three Mills group in particular.
66. The Illustrative Masterplan deals with each of these issues. There is a proposed strategy for pedestrian crossings along the A12 and the improvement of the underpass to Bromley by Bow underground station. Built form is set back away from the river, reducing any flood risk and allowing for direct access and the creation of a park by the river. The re-alignment of the Three Mill Lane creates clear, identifiable routes. The scheme allows for a different mix of uses and massing of the buildings in the closest proximity to the listed group, thus creating a carefully considered and sensitive setting for the listed buildings.

67. The Illustrative Masterplan offers the opportunity to revive this underperforming Site, and its immediate and surrounding areas, including the Three Mills listed buildings group and the Three Mills Conservation Area. The improved visual and physical relationships created by the Illustrative Masterplan in relation to the listed buildings and the Conservation Area will emphasise the latter’s heritage significance and help reinstate the Three Mills group as an attractive focal point of the proposed new neighbourhood, rather than the underused backwater that this area appears to be today.

**Energy**

68. An assessment has been made of the potential to connect the Site to existing heat networks. A favourable option in carbon terms would be to connect to the Olympic Park Heat Network. AECOM’s initial assessment of the feasibility of this has concluded that a connection is unlikely to be possible prior to development coming forward. In the absence of a likely connection to the Olympic Park Heat network the preferred option from a policy perspective would be to deliver a site wide heating network to serve all proposed plots and development within the Site.

69. An energy centre housing a CHP engine and associated plant would ideally be delivered as part of Phase 1 of the illustrative masterplan, as this is likely to have a significant heat load and will enable early connection to the heat network. Early masterplanning has identified a location for the energy centre at the ground floor of one of the taller blocks in the south-west corner of the Site. This location would allow the energy centre flues to be installed with the building reducing their visual impact and allowing them to terminate at high level to enable dispersion of the flue gases. Gas boilers would be provided to serve standby and peak loads.

**Conclusions**

70. The suite of Environmental Impact Topic Reports has assessed the potential environmental effects of the illustrative masterplan, which demonstrates how the maximum parameters of the SPD for the Site could be adopted. The Reports have informed the development of the illustrative masterplan and have highlighted a number of positive outcomes of the illustrative masterplan, including:

- Provision of housing, employment and spending in the locality;
- Provision of a primary school and community facilities, which will be of benefit to the wider local community;
- Improvement in the Site and it’s setting;
- Provision of areas of open space, which have the potential to bring ecological improvements to the Site; and
- Improvement in ground conditions through the clean-up and redevelopment of the Site.

71. Potential adverse effects of the illustrative masterplan include:

- Levels of air quality on the Site and in the locality, however this is due to atmospheric emissions from the existing traffic flows on the A12;
- Ground-borne noise levels within the Site; and
- Some (limited) instances of effects on levels of daylight and sunlight to surrounding properties, albeit the existing Site is currently occupied by low level massing which does not present any significant obstruction to the daylight within the surrounding receptors.

72. The Environmental Impact Topic Reports identify further work that would be required to inform detailed design stages for future redevelopment of the Site in support of a planning application/s, including:

- Detailed calculations will need to be undertaken once detailed information on the foundation constructions of the buildings adjacent to the southern Site boundary is available to identify design
mitigation required to protect proposed structures from ground-borne vibration from the railway at the southern boundary;

- Ground investigations to inform foundation design;
- Wind modelling to identify suitable design mitigation for areas experiencing higher wind conditions; and
- Daylight assessment of internal layouts to identify suitable measures to improve the internal daylight levels within the Site, once built out.
References

Ref. 1 London Legacy Development Corporation (2015), Local Plan 2015 to 2031
Ref. 2 Mayor of London (2014), Supplementary Planning Guidance on Sustainable Design and Construction.
Ref. 3 Mayor of London (2014), Supplementary Planning Guidance on Sustainable Design and Construction
Ref. 4 Department for Communities and Local Government (2012), National Planning Policy Framework.
Ref. 5 Mayor of London (2015), The London Plan
Ref. 6 Mayor of London (2015), Minor Alterations to the London Plan
ABOUT AECOM
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