

Environmental Statement

Non-Technical Summary

Cavalry Barracks, Beavers Lane, Hounslow,
TW4 6HD



London



Harrogate



Bristol

1. Introduction

1.1. The Applicant (Inland Ltd) is submitting an application for the following development:

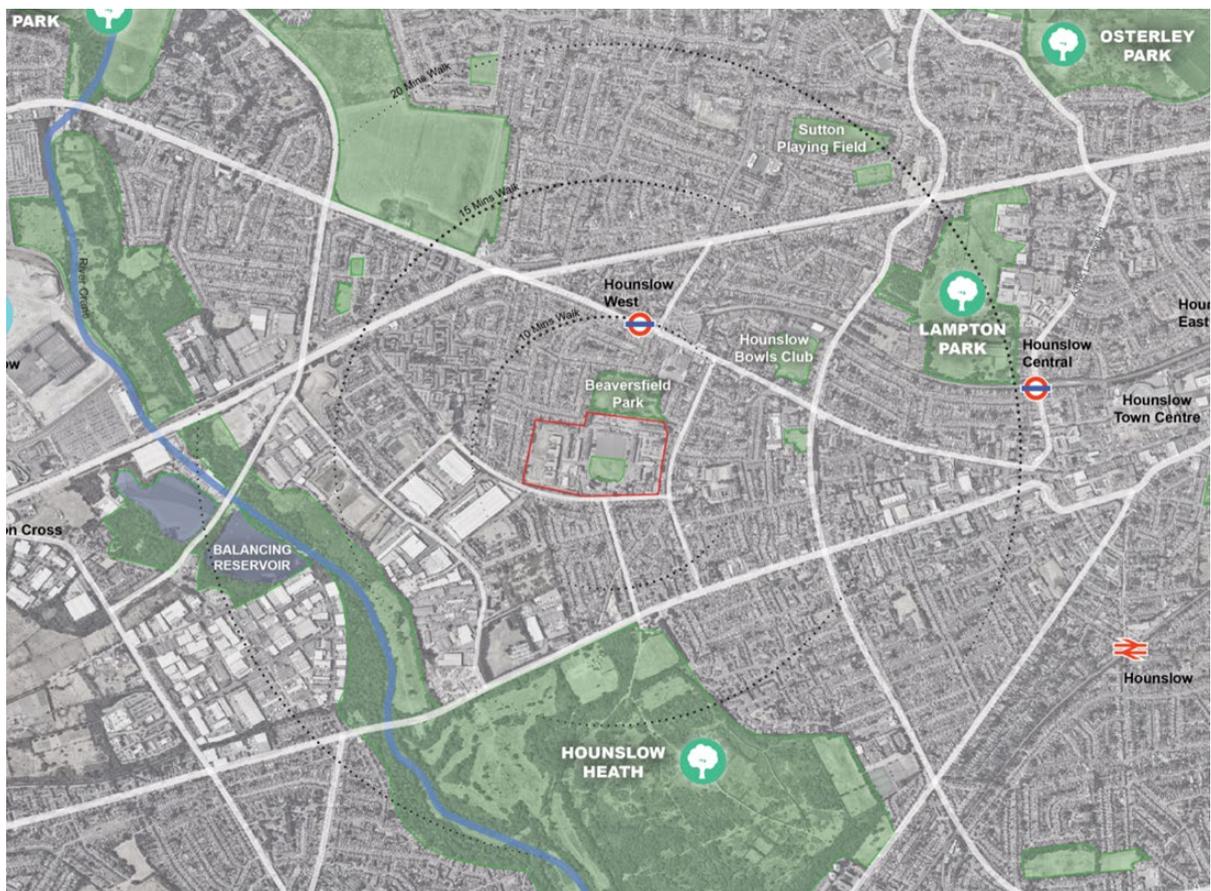
“Hybrid Planning Application to develop the Cavalry Barracks Site in phases for a new residential-led development (Use Class C3); with supporting mixed uses (non-residential floorspace - Use Classes E and F), demolition of buildings and structures; retention, conversion and re-use of statutory and locally listed buildings; sports pitches; landscaping; public and private open space; new and modified access; car parking; and other associated and ancillary works.

Listed Building Consent for internal, external, structural and non-structural alterations to Listed Building(s).

The first phase (detailed element) will contain 801 residential units and 1,652 sqm (GIA) of ancillary non-residential floorspace (Use Classes E and F), demolition of some buildings and structures; retention, conversion and re-use of some statutory and locally listed buildings, with the later phases (outline element) seeking to deliver up to a further 828 residential dwellings and up to 1,021 sqm (GIA) of ancillary non-residential floorspace (Use Classes E and F) through future reserved matters applications”

1.2. The site covers a total area of approximately 14.94 hectares (ha) and is located within the boundary of the London Borough of Hounslow (LBH). The location of the site (outlined in red) is shown in Figure 1.1.

Figure 1.1 Site Location (Red) and Surrounding Context



Source: TP Bennet Architects

1.3. The proposed redevelopment of the site will involve the demolition of some of the existing buildings and structures on site, and the construction of a set of multi-storey buildings, the tallest building up to 6 storeys (above ground level).

1.4. Between the new buildings proposed and the reuse of a number of the existing buildings (including extension's and alterations) the proposals will provide a residential led scheme, with ancillary mixed uses, comprising flats, town houses, other residential accommodation (Use Classes C3). The proposals are to deliver up to 1,629 residential dwellings, with 2,673 sqm (GIA) on non-residential uses.

- 1.5. The site currently houses the 1st Battalion Irish Guards, is an operational military barracks, in Hounslow West Ward, within the London Borough of Hounslow. The 1st Battalion Irish Guards are vacating the site in August 2021, relocating to Barracks in Aldershot.
- 1.6. The site contains 59 buildings, 14 of which are Grade II Listed, with a further 19 Locally Listed. The buildings vary in architectural and structural quality and include a range of building heights, from single to six storeys.
- 1.7. The site is bordered to the north by Beaversfield Park, Clifford Road to the north west, Basildene Road to the west, and Martindale Road to the east. The site is contained by metal fencing or walls, restricting public access and views into the site. Site access for both vehicles and pedestrians is provided via two gated locations on the southern edge of the site on Beavers Lane and there is an additional entrance on Martindale Road.
- 1.8. The site is allocated in the Adopted Hounslow Local Plan (2015), with Supplementary Planning Guidance, in the form of the Cavalry Barracks Planning Brief, setting out the Council's aspirations for the redevelopment of the site.

Rationale for undertaking an Environmental Impact Assessment

- 1.9. Due to the scale of the Proposed Development, the project needed to be 'Screened' under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017¹ ('the EIA Regulations'), for its potential for 'Significant Environmental Impacts'. The Screening Decision confirmed the proposals would require an EIA.
- 1.10. The Applicant Team then prepared a Scoping Request, which set out what they considered to be the potential areas whereby the impacts could have the potential to be deemed significant when the scheme comes forward. In November 2020, LBH provided the Applicant with a Scoping Opinion agreeing which topics they considered to have the potential for 'Significant Environmental Impacts'. The agreed list of disciplines which therefore required further consideration through the Environmental Impact Process were established as follows:
 - Socio-Economics;
 - Archaeology;
 - Ecology;
 - Traffic and Transport;
 - Air Quality;
 - Daylight, Sunlight and Overshadowing;
 - Noise and Vibration; and,
 - Aviation; and,
 - Townscape, Heritage and Visual Impact Assessment.
- 1.11. The remaining disciplines would still be fully considered as part of the planning application process, however, the above list set out the parameters for those to be considered through the Environmental Impact Assessment. Accordingly, each of the above disciplines forms a separate chapter of the Environmental Statement, whereby the impacts associated with the Proposed Development have been fully considered.
- 1.12. This short report provides a non-technical summary of that information, however, should you seek further detail on any discipline, please refer to the Main Environmental Statement; which is set out in three volumes:
 - ES Volume 1: Main ES – a document which forms the main body of the ES and which comprises of the following non-technical and technical chapters:
 - Chapter 1: Introduction;
 - Chapter 2: EIA Methodology;
 - Chapter 3: Alternative & Design Evolution;
 - Chapter 4: Proposed Development;
 - Chapter 5: Demolition and Construction;
 - Chapter 6: Socio-Economics;
 - Chapter 7: Archaeology;

¹ Her Majesty's Stationery Office (2017); The Town and Country Planning (Environmental Impact Assessment) Regulations 2017

- Chapter 8: Ecology;
 - Chapter 9: Traffic and Transport;
 - Chapter 10: Air Quality;
 - Chapter 11: Daylight, Sunlight and Overshadowing;
 - Chapter 12: Noise & Vibration;
 - Chapter 13: Aviation;
 - Chapter 14: Effect Interactions;
 - Chapter 15: Likely Significant Effects and Conclusions;
 - Chapter 16: Mitigation and Monitoring;
 - Chapter 17: Glossary and Abbreviations.
- ES Volume 2: Townscape, Heritage and Visual Impact Assessment – a separate townscape, heritage and visual impact assessment (THVIA) document that will be accompanied by a full set of views and verified images;
 - ES Volume 3: Technical Appendices – comprises background data, technical reports, tables, figures and surveys. The following appendices are included:
 - Appendix: EIA Scoping;
 - Appendix: Supporting Technical Information;
 - Appendix: Socio-Economics;
 - Appendix: Archaeology;
 - Appendix: Ecology;
 - Appendix: Traffic and Transport;
 - Appendix: Air Quality;
 - Appendix: Daylight, Sunlight and Overshadowing;
 - Appendix: Noise & Vibration;
 - Appendix: Aviation.

Proposed Development

1.13. The Proposed development consists of the following components:

- Up to 1,629 residential dwellings (range of dwelling sizes and typologies (both apartments and townhouses));
- Up to 2,673 sqm of supporting commercial and community uses (451 sqm GIA new build / 2,222 sqm GIA conversion) (the range of uses will deliver retail, workspace, community facilities and leisure);
- 12,717 sqm of private amenity space will be provided across the site, in the form of balconies, terraces and private gardens;
- The site will also include 43,320 sqm of communal open space in the way of communal gardens, open spaces and the central space (the central space will contain two football pitches).
- Car parking for the residential uses will be provided at a ratio of 0.3 spaces per unit, equating to a total of 493 spaces (with 10 visitor spaces). Blue Badge parking is provided for 3% of dwellings (53 spaces). Active electric vehicle charging facilities are provided for 20% of spaces, the remaining 80% of spaces feature capability for future electric vehicle conversion. 6 car club bays will also be provided;
- A total of 3,044 cycle spaces, including 2,934 long-stay residential spaces will be provided;
- 110 dwellings per hectare (dph) (entire site) = 141 dph (Detail), 90 dph (Outline);
- 10% wheelchair accessible; and,
- Assumed 40% affordable housing.

Summary of Chapter 6 of the Environmental Statement: Socio-Economics

1.14. The Proposed Development offers a mix of residential and employment development on site, as well as community uses and open space. The impacts of the development itself have considered (through construction and occupation), along with the potential impacts

of the circa 3,259 people expected to live at the completed development. The assessment focused primarily on the Principle Study Area, which is a 2km radius of the site (covering the whole of Hounslow West Ward).

1.15. The socio-economic assessment of the Proposed Development's impacts, considers the following topic areas:

- Employment;
 - On-Site / Off-Site
 - Temporary / Permanent
- Housing;
- Social Infrastructure;
 - Education
 - Childcare facilities;
 - Primary Schools;
 - Secondary Schools;
 - Primary Healthcare
 - GP's and Dentists;
 - Open Space and Play Space
 - Open Space;
 - Play Space;
 - Other Recreation

1.16. Following an assessment of each area of interest it was found that once the development is completed the Proposed Development would have the following impacts:

- Employment
 - Positive effects: There would be approximately 184 new on-site employment created as a result of new employment floorspace and newly introduced expenditure from the new households resident at the Proposed Development on the Impact Area Related to Local Economy (LBH);
 - Positive Effects: Off-site employment created as a result of new employment floorspace and newly introduced expenditure from the new households resident at the Proposed Development on the Impact Area Related Economy (London);
- Housing
 - Positive Effects: associated with the delivery of new housing stock to the Impact Area Related to Housing (LBH) on housing supply. The delivery of up to 1,629 dwellings equates to approximately 2 years of LBH's housing need;
- Education
 - There will be the potential demand from new residents for early years and primary school places in the Principal Study Area and for secondary schools places in the Impact Area Related, these could be mitigated through Community Infrastructure Funding and the potential for on-site nursery facilities. There is some existing capacity, however the funding secured as a result of the development, will allow for the impact to be mitigated;
 - Positive Effects: The potential delivery of a creche / nursery on site as an indicative use within the outline element of the planning application which would serve as a benefit to the wider community, following a shortfall being identified in the area.
- Primary Healthcare
 - There will be a potential demand from new residents for primary health care services in the Principal Study Area, equating to approximately 2 new doctors, which would be mitigated through Community Infrastructure Funding;
- Open Space and Play Space / Recreation
 - Positive Effects: new Open Space and Play Space provided to meet the needs of the new community and the wider existing community, a positive impact on the current position. The Proposed Development includes 43,320 m² of communal open space in the way of communal gardens, open spaces and the central space, as well as funding towards improvements at Beaversfield Park.

1.17. Accordingly, the assessment of the Proposed Development has not identified any residual significant effects of adverse nature relating to Socio-Economics.

Summary of Chapter 7 of the Environmental Statement: Archaeology

- 1.18. The Site lies on high ground sloping slightly to the southeast. The potential for surviving in situ archaeological remains on the Site is moderate or low for ground beneath the footprint of existing buildings and their associated services, due to likely truncation or destruction. Conversely, archaeological potential is likely high for greenfield/undeveloped areas. No past archaeological investigations have been carried out on the Site to date.
- 1.19. There is a high potential for post-medieval and medieval archaeological remains including former structures, isolated artefacts, and agricultural features such as ditches and pits. There may be evidence of former post-medieval military activity. The significance of such remains depends on their nature and extent but may be of low or medium heritage significance. There is a low to moderate potential for prehistoric or Roman archaeological remains. Prehistoric remains may include isolated artefacts (flints), and Roman remains, if present, might include evidence of brickearth quarrying. The significance of any such remains depends on their nature and extent but may be of low or medium heritage significance.
- 1.20. The ES statement considers all potential effects of the Proposed Development, both during the construction phase as well as the various operational phases of the development, and evaluates the effects using the following variables –
- Identification of Receptor
 - Description of impact from proposed development
 - The sensitivity of the Receptor
 - The identification of the resultant effect and scale (magnitude of impact)
 - The nature of the resultant effect
 - The geographic extent of the effect
 - The duration of the effect
 - The type of effect
 - The identification of any residual effects
 - The significance of the effect
- 1.21. The Proposed Development would have adverse effects that could be considered permanent, direct, and irreversible with a spatial extent of site level on prehistoric, Roman, medieval, and post-medieval archaeological remains during the construction and demolition phase. It is not anticipated that there would be any effects to archaeological remains once the Proposed Development is operational.
- 1.22. The identified effects may be addressed through a program of mitigation, including archaeological investigative works (evaluation), excavation, recording, and potential publication/dissemination of the results.
- 1.23. If a program of mitigation is implemented successfully, the residual effects on the archaeological receptors on the Site would be reduced from a Minor–Moderate Adverse effect to a Negligible–Minor Adverse effect.

Summary of Chapter 8 of the Environmental Statement: Ecology

- 1.24. Current development proposals indicate that the site is to be redeveloped with a number of two, three, four, five and six storey residential buildings, some extensive soft landscaping and access roads. There will be specific habitat features installed as part of this development, green roofs forming one of the integral ecological features here. It is understood that a number of the present on-site buildings are listed and will be retained and renovated rather than demolished.
- 1.25. A data-gathering exercise was undertaken to obtain information relating to statutory and non-statutory nature conservation sites, priority habitats and species, and legally protected and controlled species. These data were requested from Green Infrastructure for Greater London (GiGL) and gathered from the MAGIC website and from aerial mapping
- 1.26. A Phase 1 habitat survey of the Site and, where possible, up to a 30m distance from the Site boundary was carried out on 09th April 2019. During the survey, distinct habitats were identified, and any features of interest subjected to a more detailed description in a target note (TN). As the standard Phase 1 habitat survey methodology is mainly concerned with vegetation communities, the survey was extended to allow for the provision of information on other ecological features, including identification of the presence or potential presence of legally protected and otherwise notable species
- 1.27. 59 buildings were recorded within the Site. These comprised primarily brick-built buildings in active use for storage, residential accommodation, offices and a canteen, as well as for various military purposes. A small number of buildings were disused and derelict. In addition, a number of shipping containers were located within areas of hardstanding. Most of the land area on Site

considered of hard standing and amenity grassland. There were smaller areas of hedgerow, introduced scrub, scattered scrub, semi mature parkland trees and ephemeral habitat.

- 1.28. The development site had areas of amenity grassland, broadleaved trees, hedges and ephemeral habitat that was identified as having the potential to provide suitable foraging habitat for bats. There were a number of buildings that had the potential to support roosting bats. Two buildings that were identified as having a high potential to support roosting bats, six building with a moderate potential to support roosting bats and 20 with a low potential to support roosting bats. The other buildings were of negligible potential to support roosting bats. Two trees were identified as having a high potential to support roosting bats, with the rest of the trees with a negligible potential to support roosting bats.
- 1.29. The trees and buildings also had the potential to support nesting birds and there was a number of designated sites within 2km of the Site.
- 1.30. The assessment of potential impacts has been undertaken assuming implementation of embedded mitigation and commitments for the proposed scheme. Residual impacts include any additional mitigation measures required. An assessment of residual impacts is then made, after assuming implementation of additional mitigation measures where required, i.e. the significance of the effects that are predicted to remain after the implementation of all committed mitigation measures.
- 1.31. The ecological receptors are have been identified as being scoped into this assessment are Native Hedgerow, Roosting and Foraging Bats, Nesting Birds and two Local Nature Reserves – Hounslow Heath and Crane Corridor. The ecological measures include site supervision during works, habitat protection, roost replacement, landscape planting and the installation of additional invertebrate habitat and bat and & boxes to provide an increase in habitat availability.
- 1.32. The housing development results in no significant change of land use but with an increase in concentration of private dwellings. There will be installed landscape features that will be designed to maintain and enhance the ecological value of this site, with a biodiversity net gain of 10%.
- 1.33. The Site was previously in use as a military barracks with large areas of residential accommodation for military personnel. The overall ecological impact/ effects on the ecological receptors, with mitigation, at this site is not significant with any residual effect on nearby designated site predicted to be not significant.

Summary of Chapter 9 of the Environmental Statement: Traffic and Transport

- 1.34. The Proposed Development has been designed to facilitate active and sustainable travel choices through high quality walking and cycling infrastructure, the introduction of a mobility hub, improved connectivity towards public transport, and limited car parking provision. Cycle parking is to be provided in line with the Publication Version London Plan standards, whilst car parking will be provided at a ratio of 0.3 spaces per dwelling. The impact of the Proposed Development during the construction and operational phases has been assessed on the following effects:
 - Severance
 - Delay
 - Amenity, fear and intimidation
 - Accidents and road safety
- 1.35. During the construction phase, vehicle routing has been carefully considered with LBH to limit the impact on the local area. Up to 12 construction vehicles are anticipated to access the site per day, equating to a maximum of two vehicles per hour. A highly managed construction delivery booking system will be implemented, whilst on-site staff and banksmen will be in place to assist with construction access and egress. The impact of the construction phase on severance and delay will be minor, and the impact on amenity, fear and intimidation and accidents and road safety will be negligible.
- 1.36. As part of the operational Proposed Development, pedestrian and cycle access points will be introduced into Beaversfield Park, improving permeability through the area for both prospective and existing local residents. A pedestrian and cycle access will also be provided onto Martindale Road from the northeastern corner of the site, whilst there will be multiple accesses onto Beavers Lane. The southern facade on Beavers Lane will be enhanced, and pedestrian and cycle crossing facilities will be implemented to enable connectivity between the site and the local area.

- 1.37. Unlocking the site for public access, and introducing pedestrian and cycle access points into Beaversfield Park, will significantly improve permeability (thus reducing journey times for pedestrians and cyclists) and road safety, whilst also reducing severance in the local area.
- 1.38. The internal masterplan is purposefully highly permeable on foot and by cycle, whilst permeability for vehicles is restricted. Segregated pedestrian and cycle links are provided along the key desire lines, both east-west and north-south through the parade ground. The on-site street environment is also designed to be pedestrian and cycle friendly, with a 20mph speed limit introduced, as well as careful surface treatment and traffic calming measures such as raised tables and landscaping.
- 1.39. Off-site mitigation will be provided in the form of a Controlled Parking Zone being introduced on local streets, again subject to consultation. This will prevent overspill car parking associated with the proposals, as development residents will not be eligible to apply for a permit. This will help to limit car ownership at the Proposed Development and will also formalise local on-street parking subsequently having a positive effect on accidents and road safety, as well as driver and bus delay.
- 1.40. The trip generation methodology and calculations have been agreed with TfL and LBH, and reflect the sustainable nature of the development. The Proposed Development impact on severance, driver and bus delay, and rail delay is yet to be confirmed, as highway and public transport modelling is being conducted to determine the development impact on the surrounding networks. Once the assessment has been conducted and validated by TfL, a Transport Assessment Addendum will be submitted, outlining the conclusions and any proposed mitigation if required to ensure that the Proposed Development impact on all effects is not significantly adverse.

Summary of Chapter 10 of the Environmental Statement: Air Quality

- 1.41. The Site is currently a military barracks serving the Irish Guards and the surrounding wider area is largely residential in nature. An Air Quality Assessment was undertaken to determine the risk to current receptors and future occupants of the site.
- 1.42. The Site is located within an AQMA as declared by the LBH for experiencing poor air quality. The Development has the potential to cause air quality impacts at existing locations. These may include fugitive dust emissions from construction works, in addition to road vehicle exhaust and energy emissions associated with the operational phase of the Site.
- 1.43. During the construction phase of the Development, there is the potential for air quality impacts as a result of fugitive dust emissions from the Site. These were assessed in accordance with the MOL SPG methodology. Assuming good practice dust control measures are implemented, as detailed in the report, the residual significance of potential air quality impacts from dust generated by demolition, earthworks, construction and trackout activities was predicted to be negligible.
- 1.44. The dispersion modelling results indicated that pollutant levels at sensitive locations across the Site were below the relevant AQOs. The Site is therefore considered suitable for residential use without the need for mitigation methods to protect future users from poor air quality.
- 1.45. Predicted impacts on NO₂ and PM₁₀ concentrations as a result of operational phase exhaust emissions were predicted to be negligible at all sensitive receptor locations considered. However, in order to protect future residents from poor air quality, good practice measures have been recommended, which will ensure a clean and safe air for the future residents.
- 1.46. Air Quality monitoring was undertaken on two separate occasions measuring NO₂, PM₁₀ and PM_{2.5} concentrations. The first monitoring period was from 12th October 2020 to 22nd October 2020. The second monitoring period was from 27th November 2020 to 11th December 2020.
- 1.47. PM_{2.5} currently does not have a short-term threshold and therefore has not been included in the exceedances summary as sufficient (yearly) data is not available. Results for both monitoring periods did not exceed the Hourly NO₂ air quality objectives. Daily PM₁₀ objective was exceeded four times in the second monitoring period. This is thought to be due to take off from the runway over the site, causing a peak in PM₁₀. It is noted that take offs from Heathrow only occur 30% of the year in the direction of London.
- 1.48. The final outcome for this assessment indicates that, following the implementation of the outlined mitigation, the development is likely to have negligible to minor adverse effect on the surrounding sensitive receptors.

Summary of Chapter 11 of the Environmental Statement: Daylight, Sunlight and Overshadowing

- 1.49. The existing baseline and context is considered largely residential in nature and the results of the Valuation Office Agency (VOA) searches can be seen below on Figure 1.2.



Source: Point 2 - Site (orange), residential properties (aqua), commercial uses (dark blue) and educational facilities (pink)

- 1.50. A fully functional three-dimensional model of the Site and surrounds has been constructed using laser scan survey information. The model includes those windows and rooms with a view over the Site and which could in turn experience a light alteration by virtue of the application scheme. The potential light effects will be assessed by reference to the Building Research Establishment Report 2011: Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice (“the BRE Guidelines”) which is commonly considered by local planning authorities to assess the acceptability of a scheme in lighting terms. Therefore, the Daylight, Sunlight and Overshadowing chapter of the Main Environmental Statement (Volume 1) will include a comprehensive set of technical information which is in accordance with the methodologies of the BRE Guidelines.
- 1.51. The implementation of the application scheme will inevitably lead to a change in the lighting condition of a number of surrounding properties along Basildene Road (to the west), Beavers Lane (to the south), Martindale Road (to the east), Ravensdale Road (to the north-east), Ravensdale Gardens (to the north-east), Ivanhoe Road (to the north-west) and Clifford Road (to the north). There are also several neighbouring gardens which may experience a change in sunlight amenity and nearby Beaversfield Park which will also be assessed in respect of potential overshadowing.
- 1.52. Point 2 have worked closely with the project architects, TP Bennett, to ensure that the design and orientation of the proposed blocks minimises the light effects to neighbouring residential receptors whilst also maintaining an appropriate scale of development for this strategically important development site. It is noted that a number of neighbouring residential properties currently enjoy a largely unfettered view over the Site and therefore record very high levels of natural light in the existing condition. The BRE Guidelines recognise such unusual situations (within Appendix F) and advocate the use of alternative target values which are appropriate for its context.
- 1.53. The overall level of strict compliance with the advisory criteria of the BRE Guidelines is very high and although there are challenges from amenity perspective, Point 2 have sought to consider both any percentage alteration and importantly the levels of retained light following the implantation of the application scheme. This approach follows a number of recent appeal decisions in London which have addressed the application of the BRE Guidelines in an urban context. The overall light effects to neighbouring properties are considered negligible to minor adverse in almost every case with a very high compliance with the BRE Guidelines. There are isolated areas where there are changes beyond the suggested advisory 20% former value although this is largely due to marginalised existing levels of light whereby any further change is likely to trigger disproportionate percentage changes. The amenity effects to open spaces (including Beaversfield Park) are considered negligible to minor/moderate adverse and within the BRE guidance.

Summary of Chapter 12 of the Environmental Statement: Noise and Vibration

- 1.54. Environmental noise monitoring was undertaken over the period of a week from 10th – 17th September 2020. A number of locations were selected in order to measure sound levels that were representative of the acoustic environment across the site. The main sources of noise were identified as being the Aircraft Movements associated with Heathrow airport, which lies approximately 2.5km to the west of the site. Several noise sensitive receptors were also identified as being within close proximity to the boundary of the site.
- 1.55. The environmental survey indicated that the measured acoustic climate was considerably lower than expected, due to the impact of Covid-19 on international air travel. Therefore, the captured data has been corrected, using industry recognised practices including the use of other noise impact assessments undertaken close to the site within the last two years, to minimise any uncertainty due to the reduced levels of flights. Further to this, by using unaffected flight data from 2019-20 and measurements of planes undertaken on site, calculations were undertaken in order to verify any correction factors applied to the survey data.
- 1.56. London Borough of Hounslow has specified that the upper limit to allow residential developments is 69 dB(A) during the day time. The sound levels measured and corrected were well below this figure so is an indication that the development would be suitable, as long as a good acoustic design accompanies the plans.
- 1.57. The scope of the assessment also includes an evaluation of the noise and vibratory impact of construction plant and road traffic associated with the development, undertaken in line with the latest revision of British Standards BS5228 Parts 1 and 2 for Noise and Vibration.
- 1.58. The current acoustic environment for habitability is assessed to indicate site suitability using British Standard BS 8233 and the World Health Organisation Guidelines to ensure a habitable environment can be achieved, both internally and externally in amenity spaces, with or without mitigation strategies.
- 1.59. Operational noise due to changes in road traffic and development building services have been considered, where appropriate, using the above guidance along with British Standard BS 4142.
- 1.60. The proposed site has the potential to have an effect on the existing surrounding residences, during both the construction and operational stages. These effects are likely to be resultant of the demolition and site remediation works, construction works, and operational noise from new residents and services.
- 1.61. These effects will be addressed through a number of effective mitigation strategies specific to each phase. A full demolition and construction noise assessment has been undertaken outlining bespoke means of mitigation and their calculated impact on each phase of construction. The impact of the operational services noise has been considered and, where necessary, mitigation strategies through use of careful enclosure design have been proposed.
- 1.62. The final outcome for this assessment indicates that, following the implementation of the outlined mitigation, the development is likely to have negligible to minor adverse effect on the surrounding noise sensitive receptors.

Summary of Chapter 13 of the Environmental Statement: Aviation

- 1.63. The development is located in Hounslow circa 3km east of London Heathrow Airport. The local environment is predominantly urban with some industrial areas located to the west of the development. Nearby residential buildings are of maximum 3 floors. On the site where the Proposed Development will be built there are currently several buildings. The existing buildings are comprised of a variable number of floors with a maximum of 4 floors, which are currently unoccupied.
- 1.64. Specific software was used to determine the impact of the Proposed Development on aviation receptors in accordance with the appropriate guidance. The potentially affected aviation infrastructures have been identified based on a database of infrastructure, published sources and inspection of relevant aviation maps. This highlighted the aerodromes, radar installations and navigation aids that require consideration. Following the initial analysis, a consultation with relevant stakeholders was carried out to discuss their position regarding the Proposed Development.
- 1.65. The analysis showed that infrastructure associated mainly with London Heathrow Airport can be affected by the Proposed Development. Building developments can interact with aerodromes' instrumentation and safety areas. The assessment has highlighted the following risks:
 - Heathrow Secondary Surveillance Radar (SSR);
 - Obstacle Limitation Surface (OLS) at Heathrow;

- NATS NERL - NATS En Route.

- 1.66. However, following the consultation with NATS it has been concluded that the Proposed Development will have no effect upon the Secondary Surveillance Radar and other NATS infrastructure (NATS NERL - NATS En Route). The consultation with London Heathrow safeguarding team regarding the effect upon Obstacle Limitation Surface (OLS) at Heathrow is still ongoing. While they have concluded that the Proposed Development will have no impact on any of the OLS once completed they have not determined yet whether the use of cranes used during demolition/construction phases will impact the OLS.
- 1.67. It is likely that the development will require a crane operation scheme which might curtail the time at which cranes can be used.
- 1.68. The Proposed Development will have no final effect upon infrastructure once the measures are considered.

Summary of Volume 2: Townscape and Heritage Visual Impact Assessment

- 1.69. This ES assesses impacts on townscape, heritage and visual receptors identified as a result of the Proposed Development. Detailed assessment is provided in a combined document, **ES Volume II: HTVIA**, and should be read in conjunction with the full Environmental Statement.
- 1.70. This volume assesses a range of heritage, townscape and visual receptors, including Character Areas, Conservation Areas, Listed Buildings (statutory and locally listed), and selected viewpoints which were identified as part of the scoping discussions with LBH and HE.
- 1.71. In summary, the majority of effects identified within this chapter are considered to be beneficial, neutral, negligible on townscape, heritage and visual receptors due to the high-quality design of the Proposed Development and the level of retention of historic fabric, whether retained completely or incorporated within the masterplan. In some instances, no changes are reported as there is no impact as a result of the Proposed Development.
- 1.72. There are thirty instances where significant effects arise in relation to heritage receptors: Buildings 1, 3, 4, 5, 6, 8, 9, 12, 16, 24, 42, 44 and 45 (Grade-II listed); Buildings 18, 21, 23, 31, 33, 34, 37, 53, 59, 61, 93, 97, 99 and 100 (locally listed); Buildings 2 and 81 (positive contributors); and the Cavalry Barracks Conservation Area, as a result of direct effects or indirect effects through the visible increased massing within the vicinity, which is within the setting of this sensitive heritage receptor. In most cases the resultant effect is found to be beneficial or neutral on balance, having had regard both to the loss of historic fabric, and the nature of what would be delivered as direct result of this loss within the masterplan. Where adverse effects are identified there would be total loss of the heritage receptor through proposed demolition which we do not consider is entirely balanced by the development proposed in its place, or where the significance of these assets, or their wider contribution, is such that even with mitigation in place, an adverse residual effect would still arise. In most cases, however, while we recognise the loss of these buildings to be adverse in effect when seen in isolation, the low level of sensitivity held by each of these buildings, and the quality of what is delivered in its place informs either a neutral conclusion or an adverse effect mitigated by the highly considered masterplan scheme, which as a whole better reveals retained heritage assets and provides a high quality of residential accommodation and urban design.
- 1.73. In respect of townscape receptors there are two significant effects are reported: Character Areas 1 and 2, which are associated with the high magnitude of change introduced by the Proposed Development but in both cases beneficial in effect.
- 1.74. Following assessment of visual receptors eight instances of significant effects are reported, Views 7, 8, 9, 12, 13, 14, 16 and 17, owing to the level of direct change introduced by the Proposed Development. In all cases the residual effect is concluded as either beneficial or neutral, on balance of the change and introduction of a high quality and well considered masterplan.

Effects Interaction / Likely Significant Effects and Conclusions and Mitigation and Monitoring

- 1.75. The significant impacts of the proposed development relate to the following areas only:
- Socio-economics – Significant Impact on housing provision (beneficial)
 - Socio-economics – Significant Impact on sports and open space facilities (beneficial)
 - Heritage Townscape Visual Impact – Significant Impact on Conservation Area (beneficial)
 - Heritage Townscape Visual Impact – Significant Impact on Locally Listed Buildings, during demolition (adverse)

- Climate Change – Significant Impact during construction and demolition due to the Greenhouse Gas emissions associated with the Proposed development (adverse).