View 17 - EXISTING: Wiggins Lane, in front of No.1, looking south-west

Existing

This viewpoint is located on Wiggins Lane, approximately 270 meters away from the centre of the Site to the northeast, facing back towards the Site. It sits on the edge of Ham House Conservation Area facing out of it, towards the Site. The view presents a narrow streetscape, and shows no.199 Wiggins Lane (partly visible to the left of the view behind a tall brick wall), identified as a building of townscape merit within LBRuT's local policies. The right of the view is framed by two storey houses dating from the mid-20th century at nos.4 and 5 St Mary's Mews on Wiggins Lane, featuring pitched roofs and red Richmond brick facades. The middle ground of the view presents parts of the eastern boundary of the Village Green and the buildings beyond on Ham Street and Ashburnham Road. None of the buildings on Site are visible from here.

Sensitivity to change

Visual receptors are likely to include people who live and work locally. The sensitivity to change in this view is considered to be *medium.*

Viewpoint map

View 17 - PROPOSED: Wiggins Lane, in front of No.1, looking south-west

Proposed

The Proposed Development is outlined in a purple wireline. The only building visible from here is the proposed community centre, located to the southeast of the Site. It can be seen terminating the view beyond the green. Its high architectural quality will be apparent from this location. The proposed height for the building sits comfortably in its context, as seen from here, and not dominating the view.

Magnitude of change

Magnitude of change is considered as *small* to *medium*.

Residual effect

Residual effect is considered to be **minor** to **moderate** and of a **beneficial** nature, owing to the benefits of the proposed community centre both in regards to better quality urban design and public realm as well as the benefits for wider community. This is not considered as significant in EIA terms.

V.17

View 18 - EXISTING: Woodville Road and Wiggins Lane, looking south-west

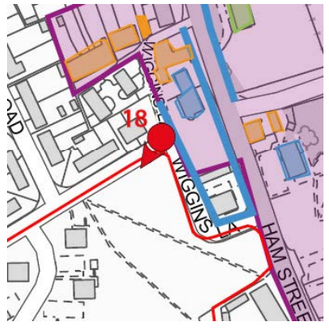
Existing

This image was taken approximately 210 meters away from the centre of the Site and is looking south-west from the Woodville Road and Wiggins Lane intersection. The foreground features the layout of Woodville Road and the Village Green , to the left of the road, which is identified as other open land of townscape importance within LBRuT's local policies. A number of trees can be seen dotted around the green and along Woodville Road, offering some visual amenity. The right of the view is dominated by a number of parked cars as well as the pavement and boundary walls/hedges of the street. A number of the existing five storey apartment blocks of the Site and the rear façade of the existing community centre can be seen centrally in this view, in the middle distance. They have no relationship with the green and create a leaky edge on the western side of the green. In addition beyond the green, to the left, some of the houses on Ashburnham Road are seen in the distance.

Sensitivity to change

Visual receptors include locals residents and people who are visiting this part of Ham. The sensitivity to change is considered to be *low* to *medium*.

Viewpoint map



View 18 - PROPOSED: Woodville Road and Wiggins Lane, looking south-west

Proposed

The Proposed Development is illustrated as an fully rendered photomontage, and is seen terminating the visual perspective in the beyond the green. Only parts of the eastern elevations of Block U, V, M, O (from right to left) as well as northern elevation of Blocks U, T, and D (along Woodville Road, moving away from the visual receptor) are seen from here. They appear in a sympathetic colour palette that relates to the historic and contextual materiality of the area. The variation in colour and facade expressions, as well as the variation and set backs of height, mitigate any possibility of coalescence between the proposed buildings and promote a diverse scheme with visual interest. The proposed blocks positioned near the green have an active relationship with the space, increasing the activity on this part of the Site, improving legibility of the green and enclosing the existing 'leaky' edge. The height and massing, as seen from here represents an increase to the existing situation, but one that is contextual and consistent with schemes currently being developed in other similar locations in London. The positioning of the buildings against the edge of the green and the surrounding streets in a gridded manner align with best practice in urban design and will greatly improve the legibility and permeability of the Site.

Magnitude of change

The magnitude of change experienced in this view is considered to be *medium to large*.

Residual effect

The visual effect as a result of the Proposed Development is considered to be **moderate**. The nature of the effect is considered **beneficial**. This is considered a **significant** effect in EIA terms.

V.18

View 19 - EXISTING: Back Lane, looking north-west

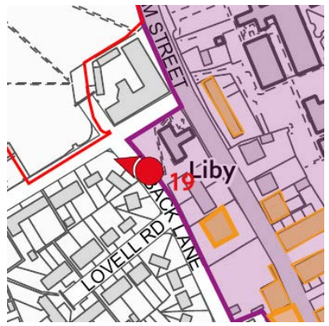
Existing

This view is approximately 200 meters away from the centre of the Site and is taken from the edge of Ham House Conservation Area (CA), close to the intersection of Back Lane and Ashburnham Road, looking outside of the CA towards the Site. The foreground illustrates the layout of Back Lane, including the hedges on the edge of Ham Library and nos. 12-14 Ashburnham Road, seen to the right, and hedges and boundary walls of houses to the right, giving Back Lane limited active frontages. The three storey building on Ashburnham Road, with shops at the ground floor is also visible to the right of the view, beyond the library boundary wall and hedge. The middle of the view presents the landscape of Village Green and beyond that some of the existing five storeys block of the Site. A number of trees can be seen in this view, including on Back Lane, and on the green. In summer the visibility to the Site would be somewhat occluded by these.

Sensitivity to change

Visual receptors are likely include people who live and work in the area. This view is positioned in Ham House Conservation Area, but it does not present any listed or designated buildings or structures. It is therefore considered that the sensitivity to change in this view is *low* to *medium*.

Viewpoint map



View 19 - PROPOSED: Back Lane, looking north-west

Proposed

The Proposed Development, illustrated as an fully rendered photomontage, is seen terminating the streetscape in the middle ground. The proposed eastern elevations of Blocks M and V are largely visible in the centre, while only glimpses of Blocks O and U are seen, immediately adjacent (either side). In addition parts of the southern elevation of the proposed community centre are seen in this view, appearing in a light brick, with a slightly darker brick at the ground floor, and the top floor, set back (occluded by the tree in the foreground). This layout creates a clear hierarchy of base, middle and top for the building. The mass and scale of the proposed buildings have been carefully sculpted so that they reflect the local context, including the prevailing tree line and other buildings seen in this image. As this position is within a close distance to the Site the Proposed Development creates a visually rich termination to this view. Proposed Development will exhibit a sympathetic colour palette that relates to the materiality in the immediate and historic context. The difference in colour and expression mitigates any possibility of coalescence between the buildings and promotes a diverse townscape. The distinctive elevational treatment of the buildings, designed in a contrasting yet contextual architectural language and material palette, along with the setbacks of the top floors and recessed balconies, break up the perceived massing of the buildings and create visual interest in this view. The positioning of the buildings against the green also create more activity along this location and a visual boundary for the open space.

Magnitude of change

The magnitude of change is considered to be *medium* to *large*.

Residual effect

The visual effect is therefore **moderate** and of a **beneficial** nature. This is considered as **significant** in EIA terms.

V.19

View 20 - EXISTING: St Richard’s CE primary School grounds, looking east

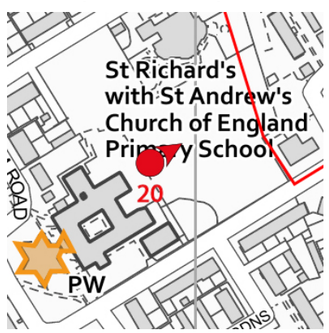
Existing

Taken from the sport pitches of St Richard’s CE Primary School, approximately 250 meters from the centre of the Site, the view shows the western boundary of the Site. These sport grounds are identified as other open land of townscape importance within LBRuT’s local policies. The foreground presents the landscape of the sport grounds, primarily a grassed area, with trees along the boundary and play equipment in the foreground. In the middle distance, the boundary wall of the Site can be seen, with the existing four and five storey blocks of the Site (west) visible beyond the wall and terminating the view To the far right a number of houses along Ashburnham Road can be seen, some rising to three storeys in height.

Sensitivity to change

Main receptors are likely to be the pupils and teachers or those visiting the school. It is considered that the sensitivity to change of receptors experiencing this view will be *medium.*

Viewpoint map



View 20 - PROPOSED: St Richard's CE primary School grounds, looking east

Proposed

Parts of the northern and western elevations of Blocks A, G and K (to the right) can be seen from here, along with the western elevations of the proposed Block B (in the centre) and parts of Block F (adjacent to this block). To the left, sections of the elevations of Block W and the proposed Maker Labs can be seen. The proposed upper floors of the six storeys Block E are also partly visible from beyond Block B (in the centre of the view). The materiality of Block B works in harmony with the boundary wall and historic context of the Site, with a red-ish brick. The Maker Labs are architecturally different in order to show the different use of the building to the residential context around it. The massing and height of the proposed blocks, though greater than the existing buildings on the Site, appear in proportion with the context and the positioning of the taller elements in the centre of the Site helps with the reduction in perceived height. The limited activation of the western elevation of Block B towards the playing fields is sensible, while creating enough breaks and visual interest with angling some of the walls and facing the windows away from the playing fields. The perceived massing from this location is also greater than the existing buildings due to the positioning of buildings to the Site boundary, allowing for the layout to comply with best practice in urban design. Overall the height remains lower than the prevailing tree line, which is a key townscape characteristic of this area. In summer, parts of the blocks will be further occluded by the trees in full leaf.

Magnitude of change

The level of change experienced as a result of the Proposed Development is considered to be *medium to large*.

Residual effect

The effect on visual amenity as seen from this viewpoint, is considered to be **moderate** and of a **beneficial** nature. This is considered as **significant** in EIA terms.

V.20

View 21 - EXISTING: Ashburnham Road (between Sheridan Road and Mowbray Road), looking west

Existing

Taken from Ashburnham Road close to intersection with Sheridan Road, the view faces towards the south-western boundary of the Site. This viewpoint is located approximately 100 meters away from the centre of the Site. The foreground of the view is dominated by the layout of Ashburnham Road, including the large grass verge (part of the Site) to the right and the trees. Parts the existing three storey blocks on the Site either side of the existing access road through the Stie can be seen centrally and to the right. To the left are some overgrown hedges, which form the boundary for houses on this street. The existing western boundary wall of the Site is seen in the middle distance, with trees beyond it and the school building and church roof and spire partly visible in the distance. The visibility of the church will be reduced in summer condition and as a result of tree occlusion.

Sensitivity to change

Main receptors are likely to be local residents walking around the area. It is considered that the sensitivity to change of receptors experiencing this view will be *low* to *medium*.

Viewpoint map

View 21 - PROPOSED: Ashburnham Road (between Sheridan Road and Mowbray Road), looking west

Proposed

The Proposed Development is shown as a fully rendered photomontage and appears to the right of this image. The elevations facing Ashburnham Road of Blocks G and A are appreciated from this location, appearing prominent in this view. The scale and massing of the proposed blocks shown in this image appear in harmony with the existing context. The proposed façade treatment enhances the character of the existing townscape, whilethe carefully chosen colour palette also plays a role in allocating a distinct identity to each building. The positioning of the buildings close to the Site boundary and the street create a positive sense of enclosure along the street, while encouraging activity and a sense of safety. The carefully landscape spaces between and in front of the blocks will make the edge of the Site boundary and its relationship to Ashburnham road more formal, while softening the character of the street; and will improve the overall public realm. The rhythm expressed throughout the facades, including recessed elevations, helps to visually mitigate the scale of the building as seen from this close-range view.

Magnitude of change

Magnitude of change experienced in this view is considered as *large*.

Residual effect

The visual effect is considered **moderate** and **beneficial**, owing to the carefully designed buildings that will add quality and visual amenity to this townscape as seen from Ashburnham Road. This is considered as **significant** in EIA terms.

V.21

View 22 - EXISTING: Woodville Road and Stuart Road intersection, looking west

Existing

Located approximately 85 meters away from the centre of the Site, this view is looking south-west from Woodville Road and is close to the junction with Stuart Road. The foreground presents the layout of Woodville Road , including the trees and grass verge to the left (within the Site). Secrett House and Newman House, both existing blocks on the Site and rising to five storeys can be seen to the left. The upper floors of The Woodville Centre appear beyond the western boundary wall of the Site, centrally in this view. Houses on Woodville Road are partly visible to the right of the image, behind boundary hedges.

Sensitivity to change

Main receptors are likely to be local residents. It is considered that the sensitivity to change of receptors experiencing this view will be *low* to *medium*, owing to the distance of this view from the Site.

Viewpoint map

View 22 - PROPOSED: Woodville Road and Stuart Road intersection, looking west

Proposed

The Proposed Development is shown as fully rendered photomontage; The northern elevations of Blocks P and D and small parts of Block W are visible from this position. Block P can be seen with a lighter coloured base, while the middle two floors appear in red brick. It is set back front the street edge and boundary slightly, allowing for formal landscaping, which helps soften the street and public realm. Block D, further right, appears in a lighter brick and rises to four storeys, while the setbacks and balcony articulation help reduced the perceived massing. The base of this block is the same as that of Block P, creating a clear visual relationship between the two. The overall height is in line with the built and landscape context seen in this image.

Magnitude of change

It is considered that the magnitude of change is *medium to large*.

Residual effect

The visual effect is considered to be **moderate** and of a **beneficial** nature, which is considered as **significant** in EIA terms.

V.22

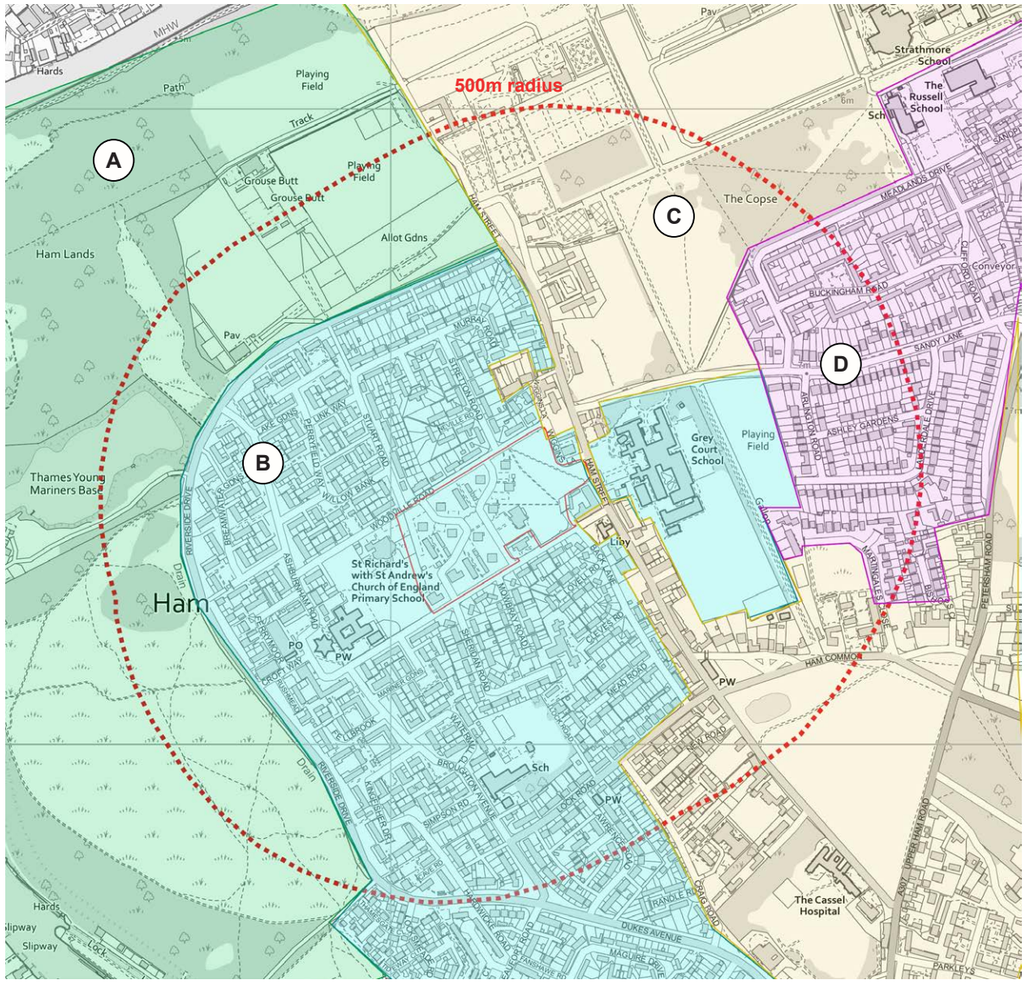


Figure 8.2: Townscape Character Areas map (within 500m radius of the Site). The Site boundary is outlined in red. Letters A-D refer to the selected areas for the assessment.

Effects on Townscape Receptors

8.19 This section presents the consultancy's assessment of the potential effects of the Proposed Development on townscape receptors, based on townscape character areas identified around the Site, informed by the views analysis. The criteria for selecting townscape receptors is set out in section 3.0 and the selected Townscape Character Areas are identified in section 6.0 of this HTVIA report.

8.20 Each of the townscape receptors is assessed through the following evaluation process: an appraisal of the existing urban characteristics of each townscape receptor is formulated to establish their baseline condition is presented in section 6.0 of this report; then, this part of section 8.0 presents the likely effects of the Proposed Development on the identified urban characteristics of each townscape receptor are assessed. Lastly, the likely cumulative effects is also assessed.

8.21 The following character areas were identified in map 6.12 and repeated in figure 8.2.

Character Area A: Ham Lands and green environs

8.22 As per section 6.0, the sensitivity of this character area is identified as **medium**. The Proposed Development is not likely to be visible from large proportions of this TCA, due to the topography, distance from the Site and landscaped nature of the TCA.

Magnitude of change

8.23 The Proposed Development lies to the south and east of this character area. Given the distance and the minimal intervisibility between most of the area and the Site, the level of change introduced is considered to be *small*.

Residual effect

8.24 The residual effect to this TCA as a result of the Proposed Development is **minor (not significant)**. Given the distance between the character area and the Proposed Development, and minimal interaction between the two, the effect is considered **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

Character Area B: Mid-20th century development

8.25 As per section 6.0, the sensitivity of this character area is identified as **low** to **medium**. The Site is located in this TCA and the Proposed Development will be highly visible from the streets that directly face towards it, or that the Site sits on, as shown in section 8 (Views 4 – 11 and Views 14, and 18- 22)). Where visible, the Proposed Development will be a great improvement to the existing situation on the Site, through improving the overall quality of architecture and urban design, increasing active frontages, creating a

positive sense of enclosure along the streets and enhancing the character of this TCA. The Proposed Development is unlikely to be perceptible from other locations in this TCA that are further away from the Site and that do not adjoin or directly face the Site.

Magnitude of change

8.26 The Proposed Development lies in the centre of this TCA. The magnitude of change in close proximity to the Site is considered to be *medium* to *large* scale. The magnitude of change within the wider context of this TCA (such as the southern parts) is considered to be small. Overall the magnitude of change for this TCA is considered to be *medium*.

Residual effect

8.27 As noted above, the Proposed Development will improve the TCA in locations close to the Site. As a result of the magnitude of change for this character area, the residual effect is considered to be **moderate** (significant) and beneficial. This is considered as a significant effect in EIA terms.

AVR cross reference: Views 4 – 11,14, and 18- 22.

Character Area C: Ham House and Ham Common character area including the historic buildings and associated structures/areas to the east

8.28 As per section 6.0, the sensitivity of this character area is identified as **medium**. The Proposed Development is unlikely to be visible from the majority of this TCA, as shown in section 8.0 (Views 1,2,3, 12, 13, 17). Where visible, the Proposed Development will be an improvement to the existing situation on the Site.

Magnitude of change

8.29 The Proposed Development lies to west of this character area. Due to the distance and the minimal between most parts of this TCA and the Site, the level of change introduced considered to be *small*.

Residual effect

8.30 As a result of the magnitude of change for the Proposed Development, the residual effect is considered to be **minor (not significant)**. Due to the distance between the character area and the Proposed Development, and minimal visual interaction between the two, the effect is considered **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: Views 1,2,3, 12, 13, 17

Character Area D: Sandy Lane Residential

8.31 As per section 6.0, the sensitivity of this character area is identified as **low**. There is likely going to be very limited intervisibility between this TCA and the Proposed Development, due to the topography and landscape qualities around the TCA.

Magnitude of change

8.32 The Proposed Development lies to the east of this character area. The magnitude of change will be *negligible* as there is no intervisibility due to the distance and limited visibility of the Proposed Development.

Residual effect

8.33 The residual effect for this TCA is therefore **negligible** (not significant) and due to the minimal to no interaction between the Site and this character area, the effect is **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A.

Cumulative effect:

8.34 There are 12 cumulative sites (see figure 6.27) that have been included in the scoping opinion. They are located at significant distances away from the Site. Due to the height of the Proposed Development primarily rising to a similar height as that of some of the taller existing blocks on the Site and the prevailing tree line in the immediate and wider area and due to the distance of these sites/schemes from the Site, it is unlikely that the Proposed Development will be experienced at the same time as any of these sites and likely cumulative schemes. The residual effect for the Townscape Character Areas assessed will therefore likely be **negligible** and **neutra**l in nature.

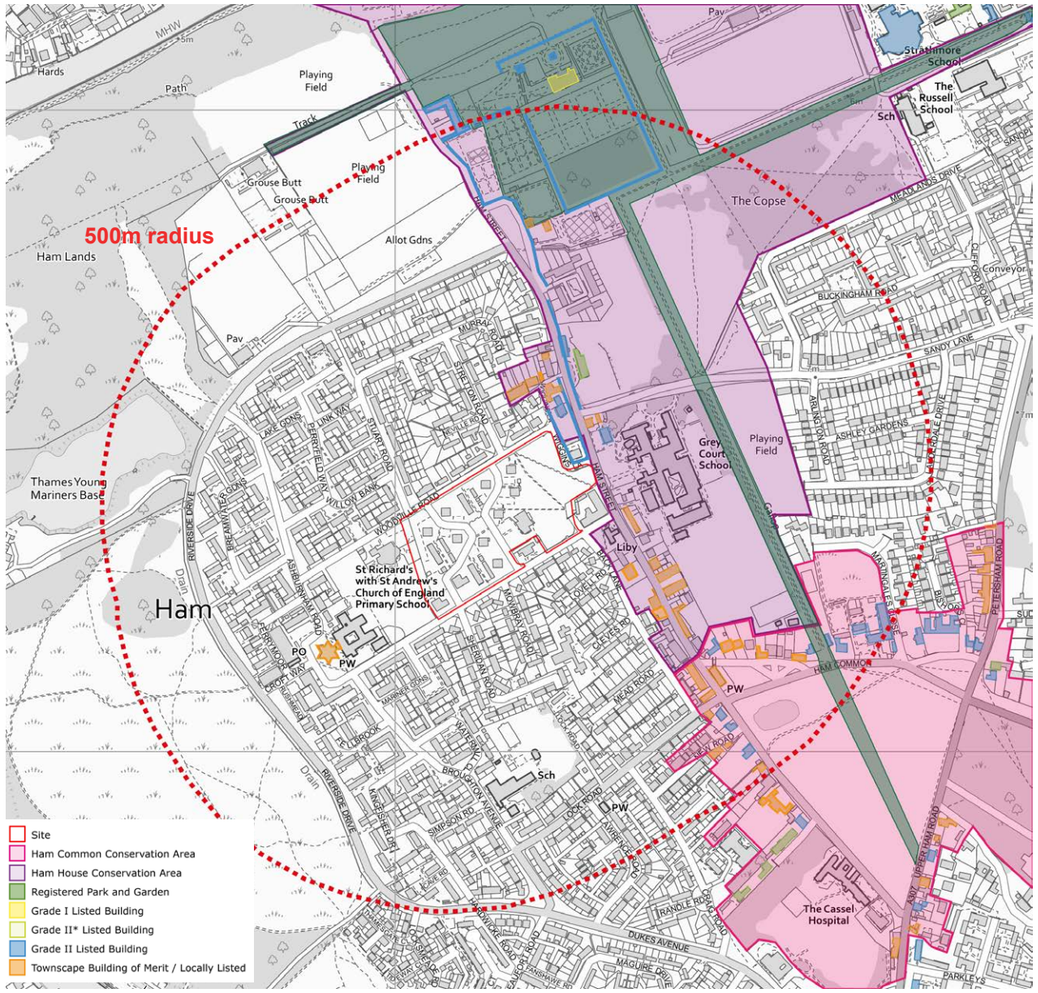


Figure 8.3: Overall heritage asset map (within 500m radius of the Site).

Effects on Heritage Receptors

8.35 This part of section 8.0 provides an assessment of the effects on the above ground heritage receptors which are set out in section 6 of this report. This includes conservation areas, listed buildings, registered parks and gardens and non-designated heritage assets such as locally listed buildings of merit. The assessments provided here are based on the methodology presented in section 3.0, which is not repeated here. With regards to the importance of heritage assets: please note that planning policy and guidance refers to it as 'heritage significance'. However, for the purpose of this ES, the word 'significance' in relation to heritage has been replaced by the word 'importance' in order to avoid confusion with references to the 'significance' of environmental effects.

8.36 A heritage asset may be defined as a building, monument, site, place, area or landscape positively identified as having a degree of importance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated heritage assets and assets identified by the local planning authority (including local listing). The NPPF defines the importance of a heritage asset as *"The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance* (or importance) *derives not only from a heritage asset's physical presence, but also from its setting."* The NPPF definition largely correlates with the interests identified by Historic England in their Historic England Advice Note 12 (October 2019).

8.37 Change, including development, can sustain, enhance or better reveal the importance of an asset as well as detract from it or leave it unaltered. The design of a development affecting the setting of a heritage asset may play an important part in determining its impact. The contribution of setting to the historic importance of an asset can be sustained or enhanced if new buildings are carefully designed to respect their setting by virtue of their scale, proportion, height, massing, alignment and use of materials.

1. Ham House

Magnitude of change

8.38 While the Proposed Development will result in an inevitable change to the extended setting of Ham House, the distance of the development, coupled with extremely low to negligible levels of inter-visibility would in no way restrict or hinder the historic-architectural legibility of Ham House. As such the magnitude of change is considered to be **negligible.**

Residual effect

8.39 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: View 12

2. Entrance, Gates and Railings of Forecourt to Ham House

Magnitude of change

8.40 While the Proposed Development will result in an inevitable change to the extended setting of the receptor the development, this will not be visible from the heritage

asset in question owing to its orientation and intervening vegetation and built form. As such the Proposed Development would in no way restrict of hinder the historic-architectural legibility of the heritage asset. As such the magnitude of change is considered to be **negligible.**

Residual effect

8.41 Owing to -negligible levels of intervisibility from within the immediate setting of the asset, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

3. Forecourt of Ham House

Magnitude of change

8.42 While the Proposed Development will result in an inevitable change to the extended setting of the receptor the development, this will not be visible from the heritage asset in question owing to its northward orientation as well as intervening vegetation and built form. As such the Proposed Development would in no way restrict of hinder the historic-architectural legibility of the heritage asset. As such the magnitude of change is considered to be **negligible.**

Residual effect

8.43 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

4. Garden Walls and Gate-piers to south of House

Magnitude of change

8.44 While the Proposed Development will result in an inevitable change to the extended setting of the receptor the development, this will not be visible from the heritage asset in question owing to intervening vegetation and built form. As such the Proposed Development would in no way restrict of hinder the historic-architectural legibility of the heritage asset. As such the magnitude of change is considered to be **negligible.**

Residual effect

8.45 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

5. Ham House Stables

Magnitude of change

8.46 While the Proposed Development will result in an inevitable change to the extended setting of the receptor the development will only be fractionally visible in wintertime condition from the heritage asset in question, largely owed to intervening vegetation and built form. As such the Proposed Development would in not restrict or hinder the historic-architectural legibility of the heritage asset within its setting. As such the magnitude of change is considered to be **small.**

Residual effect

8.47 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

6. Ice House

Magnitude of change

8.48 While the Proposed Development will result in an inevitable change to the extended setting of the receptor, this will not be visible from the heritage asset in question owing to the intervening vegetation and built form that comprises its setting. As such the Proposed Development would in no way restrict of hinder the historic-architectural legibility of the heritage asset. It is considered that the magnitude of change is **negligible.**

Residual effect

8.49 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

7. Service Yard Entrance to West of House

Magnitude of change

8.50 The distance of the development coupled with the self-contained setting of the service yard and intervening built form means the proposals will not be visible from the heritage asset in question. As such the Proposed Development would in no way restrict of hinder the historic-architectural legibility of the heritage asset. It is considered that the magnitude of change is **negligible.**

Residual effect

8.51 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

8. Tea Room

Magnitude of change

8.52 While the Proposed Development will result in an inevitable change to the extended setting of the receptor, this will not be visible from the heritage asset in question owing to the intervening vegetation and built form that comprises its setting as part of Ham House. As such the Proposed Development would in no way restrict of hinder the historic-architectural legibility of the heritage asset and it is considered that the magnitude of change is **negligible.**

Residual effect

8.53 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

9. Manor House

10. Stables to Manor House

Magnitude of change

8.54 While the proposals are situated in close proximity to the Manor House and Stables, the enclosed and linear nature of Ham Road to the west, namely provided by its boundary walls and border planted with mature trees, the proposals are entirely screened from view. This subsequently allows the setting of the Manor House and Stables, and those elements of the historic street and townscape that contribute to its importance, to remain entirely legible. As such neither its setting nor significance would be restricted or meaningfully changed. In light of this, the magnitude of change is considered to be **small.**

Residual effect

8.55 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

11. Beaufort House

Magnitude of change

8.56 As outlined, it is the historic-architectural setting to the north of Beaufort House that contributes to its heritage importance, with the surroundings to the south defined by the existing twentieth Ham Close Estate. As such any perceived erosion to the historic setting has already taken place; with the proposals comprising a re-development of the existing estate, they will not result in any change to the setting of the heritage asset that hinders the ability to understand it or its features of special interest. In light of this, the magnitude of change is considered to be **small to medium.**

Residual effect

8.57 Beaufort House is situated in close proximity to the Site and a visual shift to its setting would be inevitable in this instance. However, given the nature of the setting outlined above, the re-development of the existing Site would not further restrict the ability to understand this heritage asset, in relation to both itself, its immediate and extended setting. The residual effect of the development proposals is expected to be **minor-moderate (not significant)** in this instance and **neutral** in nature. The form of impact is determined to be neutral in effect due to the minor level of intervisibilty between the asset and Proposed Development. Though the scheme is of higher architectural quality to the existing building on the Site, the location of these buildings on the Site and their relationship to the asset, mean that is will be experience with a neutral effect. This is not considered significant in EIA terms.

AVR cross reference: View 13

12. Beaufort Cottages

Magnitude of change

8.58 It is the immediate historic-architectural setting of the cottages that best informs their heritage importance, specifically their shared context with Beaufort House, of which they comprise the northern frontage. Despite the close proximity of the Proposed Development, the intervening built form provided by the house itself, the magnitude of change is considered to be **small.**

Residual effect

8.59 The screening and importance of setting provided by Beaufort House to which they are joined means that the Proposed Development will not impede or restrict the significance, and that subsequently derived by their setting, of the cottages. As such the residual effect is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

13. Boundary Wall to Beaufort House

Magnitude of change

8.60 The scale of the area covered by the boundary wall, namely that it extends southward, the southern border terminating in close proximity to the development Site means that levels of inter-visibility with the Proposed Development will be distinctly higher. However, in a similar nature to Beaufort House, it is the historic-architectural setting to the north of the asset in question that contributes to its heritage importance, with the surroundings to the south defined by the existing twentieth Ham Close Estate. As such any perceived erosion to the historic setting has already taken place; with the proposals comprising a re-development of the existing estate, they will not result in any change to the setting of the heritage asset that hinders the ability to understand it or its features of special interest. In light of this, the magnitude of change is considered to be **small.**

Residual effect

8.61 The boundary wall, which encompasses the southern foot and grounds of the adjacent Grade II listed building, is situated in close proximity to the Site and a visual shift to its setting would be inevitable in this instance. However, given the nature of the setting outlined above, the re-development of the existing Site would not further restrict the ability to understand this heritage asset, in relation to both itself, its immediate and extended setting. The residual effect of the development proposals is expected to be **minor-moderate (not significant)** in this instance and **neutral** in direction. The form of impact is determined to be neutral in effect due to the minor level of intervisibility between the asset and Proposed Development. Though the scheme is of higher architectural quality to the existing building on the Site, the location of these buildings on the Site and their relationship to the asset, mean that is will be experience with a neutral effect. This is not considered significant in EIA terms.

AVR cross reference: Views 13 and 17

14. Boundary Wall on East Side of Ham Street between Ham House Stables and the Manor House

Magnitude of change

8.62 The linear and enclosed nature of this heritage asset, both provided by the wall itself as well as surrounding buildings and mature tree planting, means that levels of inter-visibility with the Proposed Development will be extremely low; particularly so to the north where the wall borders Ham House. There will be no significant shift in the visual relationship between both elements and the magnitude of change is subsequently considered to be **negligible**.

Residual effect

8.63 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset, the ability to appreciate and understand the asset in question will not be detrimentally affected. There will be some minor change to the extended setting of the southern foot of the wall, but this will be almost perceptually invisible owing to the screening provided by vegetation and the built environment. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in direction. This is not considered significant in EIA terms.

AVR cross reference: N/A

15. Orford Hall St. Michaels Convent

Magnitude of change

8.64 The presence of the new structures as part of the re-development scheme will not result in the significance contributed by the setting of Orford Hall to be effected. It is the historic built environment and landscape that comprises the setting to the south, east and west that informs the heritage importance of this building. Coupled with this, the flat topography, intervening vegetation and built form means that there will be no significant visual shift in the existing built environment relationship and the magnitude of change is considered to be **negligible.**

Residual effect

8.65 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset and the Ham Common Conservation Area, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

16 & 17. Avenue Cottage(s)

Magnitude of change

8.66 The presence of the new structures as part of the re-development scheme will not result in the significance contributed by the setting of the cottage buildings to be effected. It is the historic built environment and landscape, both in the form of the common and avenue that comprises the setting which informs the heritage importance of the buildings. Coupled with this, the flat topography, intervening vegetation and built form means that there will be no significant visual shift in the existing built environment relationship and the magnitude of change is considered to be **negligible.**

Residual effect

8.67 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset and the Ham Common Conservation Area, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

18. Avenue Lodge

Magnitude of change

8.68 The presence of the new structures as part of the re-development scheme will not result in the significance contributed by the setting of Avenue Lodge to be effected. It is the historic built environment and landscape, both in the form of the common and avenue which informs the heritage importance of this building. Coupled with this, the flat topography, intervening vegetation and built form means that there will be no significant visual shift in the existing built environment relationship and the magnitude of change is considered to be **negligible.**

Residual effect

8.69 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset and the Ham Common Conservation Area, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: View 1

19. Ensleigh Lodge

Magnitude of change

8.70 The intervening built form and flat topography of the surrounding land means that the Proposed Development will not be visible from Ensleigh Lodge. As a result there will be no appreciable change to its setting and the subsequent significance contributed to by this and the magnitude of change is considered to be **negligible.**

Residual effect

8.71 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset and the Ham Common Conservation Area, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

20. Newman House

Magnitude of change

8.72 While there will be an inevitable change to the setting of Newman House, given the proximity of the building to the Site and the current levels of inter-visibility the proposals would only change the existing views and not the ability to appreciate this group of heritage receptors in their architectural and historic context, overall not reducing their legibility. The magnitude of change is considered to be **small**.

Residual effect

8.73 Newman House is situated in close proximity to the Site and a visual shift to its setting would be inevitable in this instance. However, given the nature of the setting outlined above, the re-development of the existing Site would not further restrict the ability to understand this heritage asset, in relation to both itself, its immediate and extended setting. The residual effect of the development proposals is expected to be **minor-moderate** (not significant) in this instance and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

21. Gordon House

Magnitude of change

8.74 The intervening built form and flat topography of the surrounding land means that the Proposed Development will not be visible from Gordon House. As a result there will be no appreciable change to its setting and the subsequent significance contributed to by this and the magnitude of change is considered to be **negligible.**

Residual effect

8.75 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset and the Ham Common Conservation Area, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. The form of impact is determined to be neutral in effect due to the minor level of intervisibility between the asset and Proposed Development. Though the scheme is of higher architectural quality to the existing building on the Site, the location of these buildings on the Site and their relationship to the asset, mean that is will be experience with a neutral effect. This is not considered significant in EIA terms.

AVR cross reference: View 1

22. Selby House

Magnitude of change

8.76 The intervening built form and flat topography of the surrounding land means that the Proposed Development will not be visible from Selby House. As a result there will be no appreciable change to its setting and the subsequent significance contributed to by this and the magnitude of change is considered to be **negligible.**

Residual effect

8.77 Owing to extremely low-negligible levels of inter-visibility from within the immediate setting of the asset and the Ham Common Conservation Area, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

23. The Little House

Magnitude of change

8.78 The intervening built form and flat topography of the surrounding land means that the Proposed Development will not be visible from the Little House. As a result there will be no appreciable change to its setting and the subsequent significance contributed to by this and the magnitude of change is considered to be **negligible.**

Residual effect

8.79 Owing to extremely low-negligible levels of inter-visibility from the Ham Common Conservation Area, the ability to appreciate and understand the asset in question will not be detrimentally affected. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: View 1

1. Ham House Conservation Area

Magnitude of change

8.80 The Proposed Development would border the Ham House Conservation Area directly to the west, and would result in an inevitable change to the immediate setting of the conservation area. However, as with the designated and non-designated heritage assets, the setting of the conservation area to the south contributes little to its overall heritage importance, being punctuated with later twentieth century development and infill, including the Site location. The nature of the proposals, namely the redevelopment of the existing Ham Close Estate, while resulting in a change of setting, would not restrict the ability to understand and read the setting of the conservation area. On balance the magnitude of change is considered to be **small.**

Residual effect

8.81 While the setting of the Ham House Conservation Area will experience a certain visual shift as a result of the Proposed Development, this change will only be observed from a localised area to the south along Ham Street and is not considered to be of such magnitude that would affect the heritage importance of the conservation area, which is not informed by the built form on the Site, the latter of which has already somewhat compromised the setting. As such it is considered that the effect on the conservation area would be **minor to moderate (not significant)** and **neutral** in nature, with no detrimental long term impact on the receptor. This is not considered significant in EIA terms.

AVR cross reference: Views 2,3,13,14,17,19.

2. Ham Common Conservation Area

Magnitude of change

8.82 The Ham Common Conservation Area, largely owed to the topography and built environment comprising it, is well screened from the Proposed Development/Site and inter-visibility between these two elements is extremely low-negligible. Factoring in this and the way in which the setting is understood, with the common acting as a focal point, the magnitude of change is considered to be **negligible**.

Residual effect

8.83 Owing to extremely low-negligible levels of inter-visibility from the location of the heritage asset, the ability to appreciate and understand the Grade II listed building in question will not be detrimentally affected. The designated and non-designated heritage assets within, the common itself as a focal point and element of intrinsic landscape value, will remain entirely legible. The residual effect in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: View 1

1. Registered Park and Garden Ham House

Magnitude of change

8.84 With the exception of a few viewpoints, which are still almost entirely screened by mature vegetation and intervening built form, the Proposed Development will be minimally visible from the registered park and garden. Where potentially visible, the distance of the development coupled with the aforementioned screening provided will not have an impact upon the significance and setting significance of this heritage receptor. In light of this it is considered that the magnitude of change is **small.**

Residual effect

8.85 The Proposed Development will possibly create a very minor backdrop to the avenue that comprises the southern section of the Registered Park and Garden. This will manifest at some distance and will potentially feature in a very select few views. However, the ability to appreciate and understand Ham House Park and Garden within the context of the surrounding architectural and historic environment will not be detrimentally affected, and the Registered Park and Garden will still retain its legibility within the area. The magnitude of change, in light of the above, is considered to be **minor (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: View 1

1. St. Richard's Church

Magnitude of change

8.86 The magnitude of change in relation to this heritage receptor in considered to be **negligible to small** due to low level of intervisibility due to the orientation of the street frontages, despite the proximity to the Proposed Development. Where visible, the Proposed Development will be an improvement to the existing situation on the Site.

Residual effect

8.87 The ability to understand and appreciate this heritage receptor would remain unaffected in the long term. Whilst there will be some level of change to the setting of this heritage receptor through the Proposed Development, this will only be minor to moderate and will not adversely affect their setting.
It is therefore considered that the effect on the listed building would be **minor to moderate (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: View 7.

2. Old Ham Lodge

Magnitude of change

8.88 The magnitude of change in relation to this heritage receptor in considered to be **negligible** due to the lack of intervisibility between the Site and receptor, due to the orientation of the street frontages and distance to the Proposed Development.

Residual effect

8.89 The ability to understand and appreciate these heritage receptors would remain unaffected in the long term and the Proposed Development will not adversely affect their setting. The residual effect would there for be considered as **negligible (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

3. The Garden House

Magnitude of change

8.90 Similar to Old Ham Lodge, the magnitude of change in relation to this heritage receptor in considered to be **negligible** due to the lack of intervisibility between the Site and receptor, due to the orientation of the street frontages and distance to the Proposed Development.

Residual effect

8.91 The ability to understand and appreciate these heritage receptors would remain unaffected in the long term and the Proposed Development will not adversely affect their setting. The residual effect would there for be considered as **negligible (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

4. 209 Ham Street

Magnitude of change

8.92 The magnitude of change in relation to this heritage receptor is considered to be **negligible.** While they are situated in proximity to the Proposed Development, the low level of inter-visibility coupled with the orientation and set back of their street frontages and means that their present townscape setting is largely retained.

Residual effect

8.93 The ability to understand and appreciate these heritage receptors would remain unaffected in the long term and the Proposed Development will not adversely affect their setting. The residual effect would there for be considered as **negligible (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

5. 1-5 Wiggins Cottages

Magnitude of change

8.94 The Proposed Development will create limited change in the setting of 1-5 Wiggins Cottages, principally owing to the landscape buffer to the east of the Site and lower level of the blocks along the north western edge of the development, closest to the locally listed building. Overall the magnitude of change is therefore expected to be **small** due to some change to the wider setting, notably a two storey community building to the eastern corner of the Site.

Residual effect

8.95 It is considered that the Proposed Development would have a **minor (not significant)** effect of 1-5 Wiggins Cottages due to the intervisibility of the community building and these locally listed assets and the receptors' level of sensitivity. It is the immediate setting that contributes most to the heritage importance of these cottages, therefore changes within the extended setting makes less of a contribution. It will be **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: View 17.

6. 1-6 Pointers Cottages, Wiggins Lane

Magnitude of change

8.96 The magnitude of change in relation to this heritage receptor is considered to be **negligible.** While they are situated in proximity to the Proposed Development, the low level of inter-visibility coupled with the orientation and set back of their street frontages and means that their present townscape setting is largely retained.

Residual effect

8.97 The ability to understand and appreciate these heritage receptors would remain unaffected in the long term and the Proposed Development will not adversely affect their setting. The residual effect would there for be considered as **negligible (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

7. 199 Ham Street

Magnitude of change

8.98 Similar to Wiggens Cottages, the magnitude of change to the setting of 199 Ham Street is limited due to the landscape buffer to the east of the Site and the orientation of the street network. The two storey community centre

to the south eastern corner of the Site will be visible in conjunction with this receptor, impacting its wider setting. Therefore, the magnitude of change is considered to be **small**.

Residual effect

8.99 The ability to understand and appreciate this heritage receptor would remain unaffected in the long term and the Proposed Development will not adversely affect its setting. The residual effect being **minor (not significant)** and of **neutral** nature. This is not considered significant in EIA terms.

AVR cross reference: View 17.

8. 52 Ham Street [&] The Royal Oak

Magnitude of change

8.100 The existing setting of this pair of locally listed buildings is defined by the 18th to 19th century development along this portion of Ham Street and, to the wider setting, taller post war infill development. The Proposed Development includes the demolition of these post war blocks along Ham Close and the construction of a denser residential development of similar building heights. This will be visible to its wider setting, though somewhat distorted by existing tree coverage. The magnitude of change is therefore considered **medium**.

Residual effect

8.101 The Proposed Development will result in a change, primarily with regards to architectural character and density to the wider setting of this pair of assets. The residual effect is deemed to be **minor (not significant)** and **neutral** in nature due to the magnitude of change, level of the receptors and the higher quality of development within the Site, which provides an improved interaction with the surrounding streetscape. This is not considered significant in EIA terms.

AVR cross reference: View 13.

9. Tollemarche Almshouses

Magnitude of change

8.102 The magnitude of change is considered **small**. Changes to the massing and density within the Site will impact the wider setting of these heritage assets as glimpses of the Proposed Development will be visible in conjunction with the Tollemarche Almshouses.

Residual effect

8.103 The ability to understand and appreciate these heritage receptors would remain unaffected in the long term and the Proposed Development will not adversely affect their setting, with the residual effect being **minor (not significant)** and **neutral** in nature. The form of impact is determined to be neutral in effect due to the minor level of intervisibility between the asset and Proposed Development. Though the scheme is of higher architectural quality to the existing building on the Site, the location of these buildings on the Site and their relationship to the asset, mean that is will be experience with a neutral effect. This is not considered significant in EIA terms.

AVR cross reference: N/A

10. 40-46 Ham Street

Magnitude of change

8.104 Due to the distance and orientation and narrowness of the surrounding streetscape the magnitude of change to the setting of the heritage receptors in response to the Proposed Development is considered to be **negligible.**

Residual effect

8.105 As locally listed buildings, the level of sensitivity of these receptors is low, the residual effect is therefore considered to be **negligible (not significant)** and **neutral** in nature. The form of impact is determined to be neutral in effect due to the minor level of intervisibility between the asset and Proposed Development. Though the scheme is of higher architectural quality to the existing building on the Site, the location of these buildings on the Site and their relationship to the asset, mean that is will be experience with a neutral effect. This is not considered significant in EIA terms.

AVR cross reference: N/A.

11. 1-18 Evelyn Road

Magnitude of change

8.106 There will be some change to the wider setting of these heritage receptors as the upper floors of the Proposed Development will be seen in the background, north west of the assets. Intervisibility will be somewhat distorted by tree coverage along Ham Street and within front gardens and the magnitude of change is thereby considered **small.**

Residual effect

8.107 Due to the low level of sensitivity and only small level of change to the wider setting of these heritage receptors, the residual effect of the Proposed Development is considered **minor (not significant)** of **neutral** nature. This is not considered significant in EIA terms.

AVR cross reference: View 2.

12. Stokes House [&] Bench House

Magnitude of change

8.108 Similar to 1-18 Evelyn Road, there will be some change to the wider setting of these heritage receptors as the upper floors of the Proposed Development will be seen above the existing surrounding townscape, north west of the assets. Intervisibility will be somewhat distorted by tree coverage, orientation of the street layout and tight urban grain. The magnitude of change is thereby considered **small.**

Residual effect

8.109 Due to the low level of sensitivity and only small level of change to the wider setting of these heritage receptors, the residual effect of the Proposed Development is considered **minor (not significant)** of **neutral** nature. This is not considered significant in EIA terms.

AVR cross reference: View 2.

13. 12-38 Ham Street

Magnitude of change

8.110 The magnitude of change owing to the Proposed Development is considered **negligible**. The Proposed Development will not be visible in conjunction with the heritage receptor in neither short nor long views.

Residual effect

8.111 Due to the low level of sensitivity of the heritage receptor and the negligible magnitude of change to its setting, the residual effect is considered **negligible (not significant)** and **neutral** in nature**.** This is not considered significant in EIA terms.

AVR cross reference: N/A.

14. Catholic Church of St. Thomas Aquinas

Magnitude of change

8.112 The magnitude of change in relation to this heritage receptor is considered to be **negligible** No intervisibility will be introduced between the heritage receptor and Proposed Development due to the distance and orientation of the street layout of this area.

Residual effect

8.113 Due to the negligible magnitude of change and low level of sensitivity, the residual effect is considered **negligible (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

15. 1-9 Ham Street

Magnitude of change

8.114 Similar to Catholic Church of St. Thomas Aquinas, the magnitude of change in relation to this heritage receptor is considered to be **negligible** No intervisibility will be introduced between the heritage receptor and Proposed Development due to the distance and orientation of the street layout of this area.

Residual effect

8.115 Due to the negligible magnitude of change and low level of sensitivity, the residual effect is considered **negligible (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

16. 1 Lock Road

Magnitude of change

8.116 The magnitude of change in relation to this heritage receptor is considered to be **negligible**. It is situated at a considerable distance to the Proposed Development and the orientation of streets layout means that the present townscape setting is retained.

Residual effect

8.117 Due to the negligible magnitude of change and low level of sensitivity, the residual effect is considered **negligible(not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

17. 26 Ham Common

Magnitude of change

8.118 The magnitude of change in relation to 26 Ham Close is considered to be **negligible**. This is due to lack of intervisibility owing to the considerable distance between the heritage receptor and Proposed Development, in addition to orientation of the streetscape and orientation of the street frontages, namely the setback of 26 Ham Common within its plot.

Residual effect

8.119 Due to the negligible magnitude of change and low level of sensitivity, the residual effect is considered **negligible(not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

18. 22 Ham Common

Magnitude of change

8.120 The magnitude of change in relation to this heritage receptor is considered to be **negligible**. It is situated at a considerable distance to the Proposed Development and the orientation of street frontages means that the present townscape setting is retained.

Residual effect

8.121 The ability to understand and appreciate these heritage receptors would remain unaffected in the long term and the Proposed Development will not adversely affect their setting, with the residual effect being **negligible(not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

19. Phoenix Cottage

Magnitude of change

8.122 Owing to the distance and tight urban grain in which this heritage receptor sits, the Proposed Development will not be seen in conjunction with it from either close or longer views. The overall magnitude of change is considered to be **negligible**.

Residual effect

8.123 It is considered that the Proposed Development will have a **negligible (not significant)** effect on the heritage importance of Phoenix Cottage. The listed building would not be detrimentally affected by the Proposed Development, namely due to its lack of visibility from within the setting of the asset. It will be **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

20. 1-7 New Road Ham

Magnitude of change

8.124 Due to the orientation of the streetscape and the distance of the heritage receptor from the Proposed Development, there will be no introduction of intervisibility within either close or longer views. The magnitude of change is therefore considered to be **negligible**.

Residual effect

8.125 Due to the low level of sensitivity designated to this asset, in addition to the negligible magnitude of change, The residual effect of the Proposed Development is considered to be **negligible (not significant)** and **neutral** in nature. This is not considered significant in EIA terms.

AVR cross reference: N/A

21. Flax Cottage

Magnitude of change

8.126 The Proposed Development will not be visible in conjunction with the heritage receptor in closer views, which is most important to its heritage importance. In longer views from Ham Common, there will be some intervisibility introduced to the background of this view, somewhat distorted by existing tree cover. The magnitude of change would be **small**.

Residual effect

8.127 The Proposed Development would result in a **minor (not significant)** residual effect of **neutral** nature. The neutral nature is owing to Proposed Development being in the wider setting of the building to the north west of the receptor, which does not inform their heritage importance. This is not considered significant in EIA terms.

AVR cross reference: View 1.

22. 45-49 Ham Common

Magnitude of change

8.128 The Proposed Development will present no change to the immediate setting of Flax Cottage due to the orientation of the streetscape and distance of the Site from this group of heritage receptors. In longer views from Ham Common, some intervisibility will be introduced as the upper floors of the proposed block appear over the existing urban setting. However, this conjunction will be distorted by existing tree coverage within the boundary of Ham Common. The magnitude of change is therefore considered to be **small**.

Residual effect

8.129 Due to the lack if intervisibiltiy between the heritage receptor and Proposed Development in close views, there will be no effect on the immediate setting of this group of assets. In longer views, which does not inform their heritage importance, the Proposed Development sits to the east of the heritage receptor, therefore the built forms will not be in direct conjunction. The residual effect is considered to be **minor (not significant)** of **neutral** nature. This is not considered significant in EIA terms.

AVR cross reference: View 1.

23. Vine Cottage

Magnitude of change

8.130 The immediate setting of this heritage receptor would remain unchanged though the Proposed Development. However, in longer views within Ham Common, a green open space to the south east of the Site, there would be some intervisibility introduced between the Site and the heritage receptor as the upper floors of the Proposed Development would appear to the background of the cottage, above the existing urban environment and mature tree coverage. The magnitude of change is therefore considered to be **small**.

Residual effect

8.131 The Proposed Development would not be visible in any close views, therefore this element of the receptors setting would remain unchanged. In long views from Ham Common the Proposed Development adds to the existing urban environment, sitting to the east of the cottage and therefore not directly impacting on the setting of the building. The residual effect is therefore considered to be **minor (not significant)** of **neutral** nature. This is not considered significant in EIA terms.

AVR cross reference: View 1.

24. Watergate

Magnitude of change

8.132 There will be no intervisibility introduced between the Proposed Development and the heritage receptor in the close or wider setting. The magnitude of change is therefore considered to be **negligible**.

Residual effect

8.133 Owing to the low level of sensitivity and negligible magnitude of change, the residual effect will be **negligible (not significant)** and **neutral** in nature. The effect on the heritage importance of this receptor will be unchanged through the Proposed Development. This is not considered significant in EIA terms.

AVR cross reference: N/A

25. Pond House

Magnitude of change

8.134 The Proposed Development will not be visible in an close views for this locally listed building due to the orientation and narrowness of the streetscape and scale of the development which would sit below the existing roofline of houses in the immediate setting of the receptor. The upper floors of the Proposed Development would appear in conjunction with the locally listed building in longer views from Ham Common to the south east, however somewhat disrupted by tree coverage. This would sit in line with the building and thereby altering its wider setting. The magnitude of change is considered to be **small-medium**.

Residual effect

8.135 The Proposed Development would appear in longer views north west from within the green open space of Ham Common, against an already a dense urban back drop. The development sits at a relative scale to the existing surrounding environment and, in addition, closer views towards the building, considered to be the most relevant to its importance, would remain unchanged. Therefore, importance of the house itself would not be significantly affected and the residual effect is considered to be **minor (not significant)** of **neutral** nature. This is not considered significant in EIA terms.

AVR cross reference: View 1.

Cumulative Effects

8.136 In relation to both the Site and this group of heritage receptors listed above, a number of cumulative sites have been identified by LBRuT to assess any cumulative effects. These sites are located at such distances away from the Site that they will not be experienced from the setting of the assessed heritage assets in conjunction with the Proposed Development. There will therefore be **no cumulative effect** in regards to the heritage assets listed above.

9. Mitigation

Mitigation and Monitoring during Demolition and Construction

9.1 Other than the use of hoarding where appropriate during the demolition and construction, no further mitigation is considered necessary. The visual effects of construction activity are unavoidable, temporary and commonplace in London.

Mitigation and Monitoring once the Proposed Development is Complete and Occupied

9.2 The design included the exploration of a number of options. The iterative design process for a complex scheme on a site such as this is integrally one where visual and heritage impacts are taken into account at each stage. Any unacceptable visual and heritage impacts are mitigated by the design team as an fundamental part of the design development. The local authority's planning officers' feedback, based on detailed knowledge of the Site and surroundings and of planning policies affecting them, are also an integral part into this process.

9.3 Following the careful consideration that has been given to the design of the new buildings and the public realm during this thorough process, therefore, the Proposed Development in the form in which it is submitted for planning permission and the form in which it has been assessed in this HTVIA does not give rise to any visual impacts which require additional mitigation.

10. Residual Effects

Table 10.1: Summary of operational heritage effects. Only 'moderate' or 'major' effects are considered significant in EIA terms.

Operational/Permanent			
Receptor – effects	**Residual effect**	**Nature of effect**	**Significance** (in EIA terms)
Heritage receptors (listed buildings)			
1. Ham House	Minor	Neutral	not significant
2. Entrance, Gates and Railings of Forecourt to Ham House	Minor	Neutral	not significant
3. Forecourt of Ham House	Minor	Neutral	not significant
4. Garden Walls and Gate piers to south of House	Minor	Neutral	not significant
5. Ham House Stables	Minor	Neutral	not significant
6. Ice House	Minor	Neutral	not significant
7. Service Yard Entrance to Ham House	Minor	Neutral	not significant
8. Tea Room	Minor	Neutral	not significant
9. Manor House	Minor	Neutral	not significant
10. Stables to Manor House	Minor	Neutral	not significant
11. Beaufort House	Minor - moderate	Neutral	not significant
12. Beaufort Cottages	Minor	Neutral	not significant
13. Boundary Wall to Beaufort House	Minor - moderate	Neutral	not significant
14. Boundary Wall on East Side of Ham Street between Ham House Stables and the Manor House	Minor	Neutral	not significant
15. Orford Hall St. Michaels Convent	Minor	Neutral	not significant
16. Avenue Cottage	Minor	Neutral	not significant
17. Avenue Cottage	Minor	Neutral	not significant
18. Avenue Lodge	Minor	Neutral	not significant
19. Ensleigh Lodge	Minor	Neutral	not significant
20. Newman House	Minor - moderate	Neutral	not significant
21. Gordon House	Minor	Neutral	not significant

Table 10.1 (Contd.): Summary of operational heritage effects. Only 'moderate' or 'major' effects are considered significant in EIA terms.

22. Selby House	Minor	Neutral	not significant
23. The Little House	Minor	Neutral	not significant
Heritage receptors (conservation areas)			
1. Ham House Conservation Area	Minor - moderate	Neutral	not significant
2. Ham Common Conservation Area	Minor	Neutral	not significant
Heritage receptors (Registered Park and Garden)			
1. Ham House	Minor	Neutral	not significant
Heritage receptors (Non-designated heritage asset)			
1. St. Richard's Church	Minor - moderate	Neutral	not significant
2. Old Ham Lodge	Negligible	Neutral	not significant
3. The Garden House	Negligible	Neutral	not significant
4. 209 Ham Street	Negligible	Neutral	not significant
5. 1-5 Wiggins Cottages	Minor	Neutral	not significant
6. 1-6 Pointers Cottages	Negligible	Neutral	not significant
7. 199 Ham Street	Minor	Neutral	not significant
8. 52 Ham Street and The Royal Oak	Minor	Neutral	not significant
9. Tollemarche Almshouses	Minor	Neutral	not significant
10. 40-46 Ham Street	Negligible	Neutral	not significant
11. 1-18 Evelyn Road	Minor	Neutral	not significant
12. Stokes House and Bench House	Minor	Neutral	not significant
13. 12-38 Ham Street	Negligible	Neutral	not significant
14. Catholic Church of St. Thomas Aquinas	Negligible	Neutral	not significant
15. 1-9 Ham Street	Negligible	Neutral	not significant
16. 1 Lock Road	Negligible	Neutral	not significant
17. 26 Ham Common	Negligible	Neutral	not significant

Table 10.1 (Contd.): Summary of operational heritage effects. Only 'moderate' or 'major' effects are considered significant in EIA terms.

18. 22 Ham Common	Negligible	Neutral	not significant
19. Phoenix Cottage	Negligible	Neutral	not significant
20. 1-7 New Ham Road	Negligible	Neutral	not significant
21. Flax Cottage	Minor	Neutral	not significant
22. 45-49 Ham Common	Minor	Neutral	not significant
23. Vine Cottage	Minor	Neutral	not significant
24. Watergate	Negligible	Neutral	not significant
25. Pond House	Minor	Neutral	not significant

Table 10.2: Summary of operational townscape effects. Only 'moderate' or 'major' effects are considered significant in EIA terms.

Operational/Permanent			
Receptor – effects	**Residual effect**	**Nature of effect**	**Significance** (in EIA terms)
Townscape receptors			
Townscape character area A: Ham Lands and green environs	Minor	Neutral	not significant
Townscape character area B: Mid-20th century development	Moderate	Beneficial	significant
Townscape character area C: Ham House and Ham Common character area including the historic buildings and structures/areas to the east	Minor	Neutral	not significant
Townscape character area D: Sandy Lane Residential	Negligible	Neutral	not significant

Table 10.3: Summary of operational visual townscape effects. Only 'moderate' or 'major' effects are considered significant in EIA terms.

Operational/Permanent			
Receptor – effects	**Residual effect**	**Nature of effect**	**Significance** (in EIA terms)
Visual Receptors			
View 1: Ham Common, looking north-west.	Minor	Neutral	not significant
View 2: Ham Street & Evelyn Road , looking north-west.	Negligible	Neutral	not significant
View 3: Ashburnham Road, Ham Library, looking west.	Minor-moderate	Beneficial	not significant
View 4: Mowbray Road, looking north.	Minor-moderate	Beneficial	not significant
View 5: Ashburnham Road, Ham Children's Centre, looking north-east.	Moderate	Beneficial	significant
View 6: Ashburnham Road & Broughton Avenue, looking north-east.	Minor	Beneficial	not significant
View 7: Croft Way & Rushmead, looking east.	Minor	Neutral	not significant
View 8: Woodville Road, looking north-east.	Minor-moderate	Beneficial	not significant
View 9: Woodville Road, looking north-east.	Minor-moderate	Beneficial	not significant
View 10: Stuart Road, looking south.	Minor-moderate	Beneficial	not significant
View 11: Murray Road & Stretton Road, looking south.	Minor-moderate	Beneficial	not significant
View 12: Ham House Garden, looking south-west.	No change	Neutral	not significant
View 13: Sandy Lane & Ham Street, looking south-west.	Minor	Neutral	not significant
View 14: Ham Street, Grey Court School, looking west.	Minor-moderate	Beneficial	not significant
View 15: Richmond Park View (King Henry VIII's Mound), looking south-west.	Minor-moderate	Neutral	not significant
View 16: Richmond Hill, looking south-west.	Minor-moderate	Neutral	not significant
View 17: Wiggins Lane, in front of No.1, looking south-west	Minor-moderate	Beneficial	not significant
View 18: Woodville Road and Wiggins Lane, looking south-west	Moderate	Beneficial	significant
View 19: Back Lane, looking north-west	Moderate	Beneficial	significant
View 20: St Richard's CE primary School grounds, looking East	Moderate	Beneficial	significant
View 21: Ashburnham Road (between Sheridan Road and Mowbray Road), looking west	Moderate	Beneficial	significant
View 22: Woodville Road and Stuart Road intersection, looking west	Moderate	Beneficial	significant

11. Conclusion

Introduction

11.1 The assessments presented in this document have taken into account the effects on heritage receptors through an assessment of their heritage importance and the contribution that their setting makes to this importance, as well as the change to the setting that would arise as a result of the Proposed Development. In terms of townscape effects, the assessments considered the baseline conditions of four townscape character areas and how the Proposed Development would change their character, either directly or indirectly, depending on their interrelationships and inter-visibility. In terms of the effect on visual amenity, the effects on visual receptors arising from changes to 22 townscape views were assessed.

11.2 The effects arising from the Proposed Development have also been assessed in light of the architects' detailed designs. Design is an iterative process in which mitigation to avoid and minimize adverse effects is embedded. The Proposed Development was described and independently assessed for its effects on the immediate and wider townscape. It was found that it has been sensitively designed, taking into consideration, and where possible mitigating against, potential adverse effects on the setting of the receptors identified in the chapters above. Overall, the proposed design is considered to be of a high quality of architectural design, and a beneficial addition to the Site and its surrounding townscape.

Effects during demolition and construction

11.3 The effects of the demolition and construction works of the Proposed Development on the surrounding heritage, townscape and visual receptors were assessed in section 8.0. Table 8.1 summarises these effects. It was found that the effects would be short-term and temporary in nature and they would affect to a higher degree areas located closer to the Site. These effects would range between negligible and moderate and would be of an adverse nature, depending on their distance between the Site and the receptors.

Effects on visual receptors

11.4 The effects of the Proposed Development on visual receptors were assessed in section 8.0 of this HTVIA. These effects are summarized in table 10.3. It was found that the Proposed Development would result in mostly minor or moderate effects in most views. Most effects were found to be not significant in EIA terms, with only views 5,18,19,20,21 and 22 were found to have significant effects in EIA terms.

Effects on townscape receptors

11.5 The potential effects of the Proposed Development on the wider and immediate townscape character areas were assessed in accordance to the methodology as presented in section 3.0, and are presented in section 8.0 of this HTVIA. It was found that the Proposed Development would have only neutral and beneficial effects on townscape receptors in the surrounding context of the Site, where most of them would be minor and therefore not significant.. Only Townscape Area B was found to have a moderate and beneficial effect which is considered as significant in EIA terms. A summary of these effects is presented in table 10.2.

Effects on heritage receptors

11.6 The potentially affected designated and non-designated heritage receptors surrounding the Site were identified by following the methodology as set out in section 3.0 of this HTVIA. They included conservation areas, listed buildings and structures, locally listed buildings of merit, and a local historic park. The importance of these receptors, including any contribution made by their setting, was also assessed. It was found that these heritage receptors and their immediate settings would not be adversely affected by the Proposed Development and that the likely heritage effects would predominantly be minor and neutral. Table 10.1 summarises the effects of the Proposed Development on the heritage receptors identified in sections 6.0 and 8.0 of this HTVIA.

Summary of effects

11.7 Except for the effects during demolition and construction, which are temporary, the effects found in the assessment as a result of the Proposed Development are largely expected to be either neutral or beneficial for the surrounding heritage, townscape and visual receptors.

Compliance with policy and guidance

11.8 Overall, the Proposed Development is found to have been designed in compliance with policy and guidance in relation to heritage, townscape and visual impacts (LBRuT SPDs, LBRuT local plan policy LP1:local character and design quality, policy LP4 on building heights, policy LP5: views and vistas, policies LP3 and LP4 on designated and non-designated heritage assets; and the Greater London Plan 2021 policies D4: delivering good design, policy D5: inclusive design, policy D8: public realm and policy D9:tall buildings). In addition to its architectural quality, the Proposed Development will offer a range of urban design, public realm and community to Ham and LBRuT in compliance with the objectives of sustainable development contained within the NPPF.

References

- National Heritage list for England
- Open Domesday
- Ham Common Conservation Area Appraisal
- Ham House Conservation Area Appraisal
- Ham is where the Heart is – A local history by the people of Ham: Supported by the Heritage Lottery Fund:
    1. The Wates Estate: Interviews, photographs and brochure - https://hamiswheretheheartis.com/ham-by-topic/housing/wates-estate/#!
    2. Ham Close: Interviews - https://hamiswherethe-heartis.com/ham-history/ham-close/
- Daniel Lysons, 'Richmond', in The Environs of London: Volume 1, County of Surrey (London 1792) pp. 436-469
- Layers of London - https://www.layersoflondon.org/
- The Genealogist - https://www.thegenealogist.co.uk/
- Digimap - https://digimap.edina.ac.uk/
- Old Maps Online - https://www.oldmapsonline.org/
- Heritage Gateway - https://www.heritagegateway.org.uk/gateway/default.aspx
- Archaeological Data Service - https://archaeologydata-service.ac.uk/archsearch/browser.xhtml
- London Picture Archive - https://www.londonpicturear-chive.org.uk/
- Britain from Above -
- https://www.britainfromabove.org.uk/en/map?country=global&view=-map#0,262466.52493474324,609599.6708161779

Appendix 1. Rockhunter's Methodology

PAGE 1

1932 - HAM CLOSE ESTATE
AVR IMAGES METHOD STATEMENT

PREPARED FOR 23.03.2022

Method Statement

1 STANDARDS

1.1 The AVR image contained in this document have been produced in accordance with the best practices and advice taken from the following documents:

a) Revised Supplementary Planning Guidance, London View Management Framework, March 2012, henceforth LVMF

b) 2015 Erratum to the LVMF 2012 SPG

c) Landscape Institute: "Visual Representation of Development Proposals, Technical Guidance Note 06/19", henceforth TGN06/19

d) Landscape Institute/IEMA: Guidelines for Landscape and Visual Impact Assessment (GLVIA3)", henceforth GLVIA3.

e) Scottish Natural Heritage: "Visual Representation of Wind Farms v2.2 February 2017", henceforth SNH 2017

2 SCOPE OF WORK

2.1 Rock Hunter Ltd. were appointed as imaging consultant, producers of AVRs and computer generated view study images by Savills on behalf of Hill. The architects are BTWP Architects. Rock Hunter Ltd. is an architectural visualisation company with 20 years of experience in creation of 3D computer models, rendering and digital imaging.

3 AFFILIATION AND PLACE OF WORK

3.1 Rock Hunter Ltd. is not affiliated with any party involved in the planning, consultation or design of the Ham Close Estate project and is acting as an independent consultant on the project. All processing of data, documentation and production of this document has been carried by Rock Hunter Ltd,

4 COMPUTER MODEL

4.1 Rock Hunter received a 3d computer model of the proposed development from BTWP Architects as well as selected architectural drawings and a site survey. The computer model was adapted to work with Rock Hunter's 3d modelling software and design changes were undertaken on instruction from BTWP Architects on the basis of supplied architectural drawings to reflect the latest design. All AVRs in this document are based on this computer model.

5 PHOTOGRAPHY

5.1 Rock Hunter produced all photography used in these images. A digital 35mm format DSLR, mounted on a tripod, was used throughout the project. The details of each photo (Camera, Lens, Date, Time, as well the position are listed in the **Technical Methodology**). Unless otherwise specified, the camera is positioned 1.6m above ground level, and the positions permanently marked on the ground. Alternatively, where marking of the ground is impractical or not permanent, an existing, distinct feature on the ground was chosen, or the point marked with temporary markings and surveyed within a few days of the photograph taken.

6 SURVEY

6.1 A professional surveyor was commissioned to survey the marked camera location and a set of camera control points for each viewpoint. This is used to determine the location of the camera position and for camera control points, a set of survey points within each photograph that are used to demonstrate the accuracy of the camera match. The survey is carried out using a mix of GNSS, laser and optical theodolite systems and are tied into OS coordinates.

7 TYPE OF AVR SHOWN

7.1 Based on the above mentioned information and our computer model, Rock Hunter then generated a set of AVRs for each viewpoint. The set includes the baseline photograph, one montage showing baseline + proposed development, and a "baseline + proposed development + cumulative schemes". Depending on what type of visualisation has been agreed with the local authority, the proposed development will be shown as AVR1 or AVR3 (LVMF) / Visualisation Types 3 or 4 (TGN 06/19).

8 VERIFICATION

8.1 Rock Hunter publishes in this document in the **Technical Methodology** all relevant details of the recorded photographs and the source information of all computer models as well as the working methods used in the creation of the AVRs to which will allow independent verification of the AVRs.

9 METHOD STATEMENT

9.1 This document was created by Rock Hunter Ltd., and shows visual representations of the proposed development in accordance with LVMF "Accurate Visual Representation" standards and TGN06/19 "Survey-verified" standards.

ROCKHUNTER, 6 RANDLE ROAD, RICHMOND SURREY TW10 7LT
+44 (0)20 7627 0416 INFO@ROCKHUNTER.CO.UK
ROCKHUNTER.CO.UK
Company No. 04050255 VAT No. 761372335

a) The LVMF defines an AVR as: *"An AVR is a static or moving image which shows the location of a proposed development as accurately as possible; it may also illustrate the degree to which the development will be visible, its detailed form or the proposed use of materials. An AVR must be prepared following a well-defined and verifiable procedure so that it can be relied upon by assessors to represent fairly the selected visual properties of a proposed development. AVRs are produced by accurately combining images of the proposed building (typically created from a three-dimensional computer model) with a representation of its context; this usually being a photograph, a video sequence, or an image created from a second computer model built from survey data. AVRs can be presented in a number of different ways, as either still or moving images, in a variety of digital or printed formats."*

b) The TGN06/19 defines Survey-verified as: " *Survey-verified photography involves using a surveyor, or survey equipment, to capture camera locations and relevant target points within the scene, which are then recreated in the 3D-model and used to match the camera image with a high degree of precision. Surveying equipment allows the camera location and fixed target points in the view to be calculated down to centimetre accuracy. Highly accurate visualisations may be produced by correctly matching the 3D model camera position and geometry of the view to the original photograph, using pixel level data, resulting in a survey-verified photomontage.*"

10 CHOICE OF VIEWS

10.1 Rock Hunter was provided with location maps for photography for each view by Savills. Where no exact location was provided, Rock Hunter took candidate photography and alternative candidate photography based on aesthetic considerations. From these candidate views Savills selected the final short list of camera locations.

11 FIELD OF VIEW

11.1 The TGN06/19 (p5, para 2.2) states that *"Baseline Photography should:*

- *include the extend of the site and sufficient context;"*

and that (p21, para 4.5.3) "*Baseline photography should be carried out with a Full Frame Sensor (FFS) camera and 50mm Focal Length prime lens, unless there are exceptional conditions where wider-angle lenses are required to fully capture the scene (e.g. tall tower blocks - see below). In such cases, any departures from FFS +50mm FL should be explained and agreed with the competent authority.*",

and that (p.28, para 1.1.7) "*If a 50mm FL lens cannot capture the view in landscape or portrait orientation (for example, if the highest point of the development is approaching 18° above horizontal) the use of wider-angled prime lenses should be considered, working through the following sequence of fixed lenses in this order: 35mm FL > 28mm FL > 24mm FL > 24mm FL Tilt-Shift.*"

and that (p.35, para 4.1.5) "*Views should include the full extend of the site / development and show the effect of the it has upon the receptor location. Additional photographs may illustrate relevant characteristics, such as the degree and nature of intervening cover along a highway or footpath, without showing the site / proposal.*"

and that (p.36, para 4.2.1.) "*The proposal under consideration and its relevant landscape context will determine the FoV (horizontal and vertical) required for photography and photomontage from any given viewpoint.*",

and that (p.54, para 13.1.1) "*The 24mm tilt shift is typically used for visualisation work where viewpoints are located close to a development and the normal range of prime lenses will not capture the proposed site*"

11.2 The preference for a 50mm prime lens, or to use a prime lens in portrait mode often does not satisfy the para 1.17, para 4.1.5 or para 4.21 for confined urban contexts, and as such a compromise has to be found that produces a wide enough HFoV, as well as including the full height of the proposed development. The reason for each choice of lens that deviates from the "FFS +50mm FL" approach has been noted in **Table "Viewpoint figure notes"**.

12 SCALE VERIFIABLE

12.1 The images are show 325mm wide if the document is printed at it's correct size of A3. Using the viewing distance reference (TGN06/19 p.14 para 3.8.4 of 542mm) this results in a viewing scale of 90% for 50mm FL landscape views, and 41% for 24mm FL landscape views.
To view them between 100-150% as per TGN06/19, prints of 50mm FL views can either be viewed at a slightly reduced viewing distance, or if printed at A2 at 118%, in the middle of the recommended range.
24mm FL views have to be printed at A0 for a 117% scale representation.

12.2 To allow views to be assessed when viewed on screens, which can have a wide variety of sizes and thus unpredictable scale, a graticule overlay has been created for each view. This shows an angle grid for the HfoV and acts as a comparative ruler for the image assessors. The graticule also shows the centre of the view on the top and bottom bars, as well as an indicator for the calculated horizon level on the left and right bars. This helps to assess the amount of vertical shift that used in a photograph that was captured with a Tilt and Shift Lens.

13 EYE LEVEL, SHIFT, ROLL

13.1 The camera was mounted on a tripod, centred over the surveyed camera locations, so that the camera is vertically positioned 1.6m above ground level (measured to the centre of the lens). This can reasonably be considered eye level, and is an accepted common practice for creating AVRs.

13.2 Virtual cameras in 3D computer programs can currently not accurately simulate shift used on Tilt and Shift lenses. For the purpose of camera matching photographs with perspective control, the image canvas is enlarged vertically so that the horizon comes to rest again in the centre of the image and a standard camera simulation is used in the 3D software package.

13.3 The camera is levelled horizontally with the aid of spirit levels or internal electronic level sensors. The resulting level is typically less than 0.5° in any direction, so that images can have both tilt (looking up or down) and roll (rotation of the horizon). Where possible, horizon control points were surveyed and allow the camera rotations to be determined from overlaying the horizon control points and photograph directly. If horizon control points are not available, the camera control points are used to derive a camera match, and in this process a good match can only be achieved when rotational parameters of the virtual camera correspond to the actual levelling errors of photograph.

14 CAMERA MATCH

14.1 Camera Control Points provided by the surveyor are used to establish a camera match. The survey points are easily identifiable, static objects in the view such as corners of windows, roofs, bases of street lights, chimney tops or road-markings. When camera matching only a virtual camera that has the same optical parameters and relationship to the 3D model, as the real camera's optical parameters and relationship to the real site will produce an accurate overlay of the Camera Control Points onto their corresponding features in the photographs.

14.2 Rock Hunter generally use a combined formula for compensating the curvature of the earth and atmospheric refraction to produce the correct Z offset for camera survey points. The formula is taken from the 2015 Erratum to the LVMF 2012 SPG, p. 282.

15 FRAMING VIEWS/ PANORAMAS

15.1 No photographs were cropped in this document. Where indicated for aesthetic reasons, a photograph was vertically extended by adding an additional photograph taken with a different amount of perspective control on the lens from the same location as the base photograph. This does not affect the quality of the camera match, as the full base photograph was used for camera matching.

15.2 The TGN06/19 makes a case for panoramas (p.36, para 4.2.1-

4.2.5) for a variety of reasons. In Appendix 8 (pp.45-47)(para 8.4.1) it confirms the SNH 2017 approach to re-projecting rectangular projections from panoramas. (p.25, para 113).
For panoramic views we capture a full 360° panorama. Camera matching, and the montage of the Proposed and Proposed + Cumulative versions are completed as 360° panoramas, before individual rectangular projection images are re-projected back for presentation, at the size and HfoV as required for each view.

16 COMPOSITING

16.1 Compositing aims to blend the computer generated content with the source photograph into a consistent montage. The proposed scheme will often be partially occluded by urban context. In long and medium distance views this will typically be buildings and terrain topography, for close views it may also include street lighting, signs, vegetation and movable objects like vehicles. The visualiser will determine the degree to which the proposed development will be visible by identifying its urban context in the photograph from site visits and notes as well as combining information from maps, camera survey data, a 3D context model, aerial and ground level photographs of the site and its surroundings. For close distance views the visualiser will determine the local context from general observations.

16.2 The proposed scheme may in places reveal context in the photograph that is hidden from the "existing" view when the existing buildings have a different massing to the proposed building. Where necessary, the revealed context was visually reconstructed from additional photography.

17 LIGHT AND MATERIALS

17.1 For fully rendered views the 3D software package uses a simulation of the sun which is set to the same date, time and geographic coordinates as the photograph. With these settings the software simulates angle and lighting of the sun and the 3D model is rendered in a virtual environment that presents a close match to the conditions in the photograph. Some differences may remain, due to haze, clouds and other atmospheric conditions at the time of the photograph, which the visualisation artist will correct using his/her experience and observations from the photograph.

17.2 The computer model itself is augmented with simulations of materials as specified by the architect. Using his/her experience and libraries of materials the visualiser will closely match these virtual materials to colour, reflectivity, refraction and light behaviour to their real-world behaviour. Such approximations are generally satisfactory in their appearance, however where directed by the design team or based on the visualiser's experience and judgement the appearance of materials may be adjusted when the AVR montage is assembled. Such alterations are generally holistic across the material and can include addition of environmental reflections. The final appearance of materials will be adjusted as directed and is at the discretion of the architect.

18 COMPUTER MODEL

18.1 Rock Hunter combined the computer model as well as the camera survey data and maps into a common, **unified coordinate system**. This unified system allows schemes and cameras to appear correctly in relation to each other and is based on OS mapping information with datum point defined near the proposed site. Choosing a local datum alleviates inherent numerical tolerances that occur in 3D software packages.

19 CUMULATIVE SCHEMES

19.1 Computer models for cumulative schemes were produced by Rock Hunter Ltd. based on electronic or paper planning application drawings publicly available from respective local authorities, come from a our library of 3D models, or were provided by the project architect. Table **List of cumulative schemes** lists the sources for each scheme. The computer models were placed in the **unified coordinate system**, using any information contained in the original planning application documents. Some planning documents contain obvious errors or no relevant OS map information. In these cases the respective architects were contacted for more information (and where made available, used) or models were placed using a "best fit" by cross referencing information from other documents, maps and available sources.

19.2 Cumulative schemes are shown using a constant thickness wire outline. The line is generated from computer renderings of each scheme and represents an "inside stroke". This means that the outer edge of the line touches the massing of cumulative schemes from the inside.

19.3 Where schemes are not directly visible in a view, the outline is represented with a dotted line that also uses the "inside stroke" principle. Visibility of a development is determined by permanent visual boundaries such as a buildings, infrastructure, terrain and street furniture that obscure the development and by temporary visual borders such as vegetation, people, vehicles or temporary hoardings. We treat the visibility of the proposed development based on a best judgement. A single tree in leaf does not obstruct the development as seasonal or maintenance measures affect the opacity over time, a number of trees behind each other can obscure a development even without leaves. Where the visibility changes across a small section of image, we aim for clarity of the diagram.

20 LIMITATIONS

20.1 Rock Hunter strives to work accurately and fairly throughout the creation of AVR images and employs a selection of advanced software packages and working methods. Despite all advances in computer simulations, rendering techniques and care taken in the process, no simulation is currently able to take into account all physical properties of camera equipment and all lighting effects inside the software package. The purpose of these AVRs is to allow a fair representation of the proposed scheme in it's photographic context as described in the LVMF and LI documents. Adjustments to the proposed scheme's appearance are done to the judgement and experience of the visualisation artist to allow for lighting and atmospheric conditions of the photograph, they are not however a scientific simulation.

21 OS INFORMATION AND LIMITING FACTORS

21.1 The basis of the 3D computer model and survey information are Ordnance Survey Sitemap® digital maps, at a 1:1250 survey scale. OS define their tolerances as follows:

Survey Scale	Absolute accuracy compared with the National Grid. Absolute error – root mean square error (RMSE)	Absolute accuracy 99% confidence level	Relative accuracy Distance between points taken from the map. Relative error	Relative accuracy 99% confidence level
1:1250 (urban)	0.5 metres	<0.9 metres	+/- 0.5 metres (60 metres)	<+/- 1.1 metres (60 metres)

Source: Ordnance Survey "os-sitemap-user-guide.pdf"

21.2 Camera locations which are positioned on bridges are typically subject to greater tolerances than camera locations which are positioned on stable ground. Bridges are flexible structures and can be subject to movement caused by vibration, loading and wind. This is especially noticeable on suspension bridges.

ROCKHUNTER, 6 RANDLE ROAD, RICHMOND SURREY TW10 7LT
+44 (0)20 7627 0416 INFO@ROCKHUNTER.CO.UK
ROCKHUNTER.CO.UK
Company No. 04050255 VAT No. 761372335

Technical Methodology

22 VIEWPOINT FIGURE NOTES

Job ID	Description	Easting/ Northing	Projection	Date/Time	Bearing	Distance	Camera	Lens	HFov	Accuracy	Chosen Lens Justification
VP01	Ham Common, looking north-west	517806.9 , 171817.1	24mm	30/01/2022, 09:54:00	314.4°	864.7m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP02	Ham Street & Evelyn Road, looking north-west	517414.3 , 172253.4	24mm	30/01/2022, 12:07:01	318.2°	309.1m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP03	Ham Street & Evelyn Road, looking north-west	517324.1 , 172354.1	24mm	30/01/2022, 12:59:10	252°	207.4m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP04	Mowbray Road, looking north	517214.2 , 172150.2	24mm	05/01/2022, 12:38:42	338.6°	212m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP05	Mowbray Road, looking north	517031.3 , 172175.1	24mm	30/01/2022, 11:33:13	37.9°	184.8m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP06	Ashburnham Road & Broughton Avenue, looking	516927.2 , 172112.7	24mm	05/01/2022, 14:44:10	40.1°	295.3m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP07	Croft Way & Rushmead, looking east	516807.6 , 172095.9	24mm	30/01/2022, 11:45:07	51.4°	393.5m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP08	Woodville Road, looking north-east	516864.6 , 172279.8	24mm	05/01/2022, 14:13:11	84.6°	259.4m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP09	Woodville Road, looking north-east	516954.3 , 172335.8	24mm	06/03/2022, 13:24:05	74.9°	163m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP10	Stuart Road, looking south	516980.8 , 172459.2	24mm	06/03/2022, 15:13:59	143.2°	182m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP11	Murray Road & Stretton Road, looking south	517074.4 , 172649.9	24mm	30/01/2022, 15:23:22	150.2°	314.1m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP12	Ham House Garden, looking south-west	517271.3 , 173025.8	24mm	01/02/2022, 10:16:55	186.8°	704.2m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP13	Sandy Lane & Ham Street, looking south-west	517304.1 , 172541.7	24mm	30/01/2022, 10:16:00	221.7°	275.9m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP14	Ham Street, Grey Court School, looking west	517329.9 , 172423.6	24mm	30/01/2022, 10:28:15	261.1°	229m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP15	Ham Street, Grey Court School, looking west	518600.2 , 173148.8	24mm	05/01/2022, 09:51:10	239.6°	1689.7m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP16	Richmond Hill, looking south-west	518285.2 , 173996.6	24mm	05/01/2022, 09:20:44	216.2°	2027.9m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP17	Wiggins Lane	517228.6 , 172575.4	24mm	30/01/2022, 10:52:06	184.4°	261.6m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP18	Woodville Road and Wiggins Lane	517236.6 , 172509.1	24mm	30/01/2022, 10:40:34	208.8°	208m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP19	Back Lane	517318.8 , 172320.8	24mm	30/01/2022, 12:19:48	300.7°	202.3m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP20	St Richard's CE Primary School	516976 , 172198.5	24mm	31/01/2022, 14:44:06	62.2°	199.1m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP21	Ashburnham Road, between Mowbray Rd. & Sheridan Rd.	517134.7 , 172240	24mm	17/02/2022, 09:29:08	266.4°	100.2m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context
VP22	Woodville Road, looking south-west	517091.6 , 172419.8	24mm	17/02/2022, 09:49:12	228.5°	85m	Canon 5D MK II	24mm TS/E	72.2°	Better than 1m	Inclusion of local context

ROCKHUNTER, 6 RANDLE ROAD, RICHMOND SURREY TW10 7LT
*44 (0)20 7627 0416 INFO@ROCKHUNTER.CO.UK
ROCKHUNTER.CO.UK

Company No. 04050255 VAT No. 761372335

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23 TABLE: LIST OF CUMULATIVE SCHEMES

Project Name	Model source	Reference
NAME	Rock Hunter model based on PA drawings	PA/1234/FA

24 CAMERA LOCATIONS

24.1 Top row:
VP01 Ham Common, looking north-west
VP02 Ham Street & Evelyn Road
VP03 Ham Street & Evelyn Road



24.2 Second row:
VP04 Mowbray Road, looking north
VP05 Mowbray Road, looking north
VP06 Ashburnham Road & Broughton Avenue



24.3 Third row:
VP07 Croft Way & Rushmead, looking east
VP08 Woodville Road, looking north-east
VP09 Woodville Road, looking north-east



24.4 Fourth row:
VP10 Stuart Road, looking south
VP11 Murray Road & Stretton Road, looking south
VP12 Ham House Garden, looking south-west

ROCKHUNTER, 6 RANDLE ROAD, RICHMOND SURREY TW10 7LT
+44 (0)20 7627 0416 INFO@ROCKHUNTER.CO.UK
ROCKHUNTER.CO.UK
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