AVONDALE DRIVE ESTATE, HAYES, LONDON BOROUGH OF HILLINGDON

Townscape, Visual Impact Addendum

Prepared by Savills Heritage and Townscape for London Borough of Hillingdon

November 2025

Project

AVONDALE DRIVE ESTATE, HAYES , HILLINGDON

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Disclaimer

Assumptions and Limitations

This report is compiled using primary and secondary information derived from a variety of sources, only some of which have been directly examined. The assumption is made that this data, as well as that derived from other secondary sources, is reasonably accurate.

03.11.2025

Contents

1. Introduction

1.1 This Townscape Visual Impact Assessment (“TVIA”) Addendum, prepared by Savills Heritage and Townscape (hereafter “the Consultants”) on behalf of the London Borough of Hillingdon, supports a Section 73 application for the redevelopment of Avondale Drive Estate (UB3 3NR). Higgins are working with LB Hillingdon (as their development partner) to deliver the regeneration of the Estate.

1.2 The Avondale Drive Estate is situated in Hayes, between Avondale Drive and Hitherbroom Park, within an established residential neighbourhood. Its proximity to schools, parks, and extensive open fields with sports facilities renders it a suitable location for family housing. The approved redevelopment proposals include the demolition of three existing council tower blocks and the delivery of approximately 240 new homes, alongside a new pocket park, associated landscaping, and podium parking.

1.3 The extant consent is a hybrid planning permission, with a detailed element (Phase 1a) comprising a 30 home residential block (Block A) and an outline element (Phase 1b and Phase 2) with all matters reserved. Following the discharge of relevant planning conditions and the approval of a number on non-material amendment applications, Block A is now complete on site, with handover anticipated in September 2025.

1.4 This Section 73 application seeks to revise specific conditions of the original planning consent (reference 76551/APP/2021/4502) for the land on the Avondale estate on Avondale Drive, Hayes, London Borough of Hillingdon (hereafter ‘the Site’, figure 1.1), including conditions 3 (approved plans), 4 (approved documents), 5 (land use/quantum), 6 (housing mix), 7 (phasing plan), 9 (density), and 10 (building heights).

1.5 The proposed Section 73 amendments (hereafter “Amended Scheme”) encompass the following key changes to the outline area:

- An increase of 56 residential units overall, including an uplift of 33 affordable homes.
- Removal of the existing parking court and an increase in podium size, intended to enhance active frontages along Avondale Drive and improve site security.
- A revised height strategy to establish a lower-level frontage along Avondale Drive and mitigate overshadowing impacts on Hitherbroom Park.
- Deletion of vehicle access around Phase 1B, aimed at improving the quality of the public realm.
- Increased separation distances between Phases 1B and 2 to create a new public square, facilitating the relocation of playspace to a safer, off-road position.

1.6 This report details any updates to policy which are relevant to the consideration of design, and townscape matters. It sets out any updates to the baseline conditions of the Site and its surroundings. The report provides a description of the Amended Scheme. It then assesses the effect of the Amended Scheme on townscape and views. The viewpoints assessed in this report correspond to those in the 2021 TVIA for the extant consent. However, several viewpoints were excluded from the assessment in this report following consultation with planning and design officers at the London Borough of Hillingdon, based on the expectation of minimal visual change between the extant consent and the Amended Scheme. These excluded viewpoints were nonetheless modelled in VU.CITY and are included for reference in Appendix B of this report.

1.7 This report should be read in conjunction with the submitted 2021 TVIA, the Amended Scheme design drawings and Design and Access Statement Addendum prepared by PRP Architects (hereafter ‘the Architects’), the landscape drawings by Liz Lake Associates and the Planning Statement Addendum prepared by Lichfields.

1.8 The aim of this TVIA is to assess the likely effects of the Amended Scheme on the visual amenity within the local and wider townscape surrounding the site.

1.9 As a result of this, a set of 6 townscape views were selected by Savills Heritage and Townscape team; and were agreed with the planning and design officers at LBH. The assessments of these views are based on AVRs produced by visualisation specialists Hayes Davidson, which provide quantitative (maximum parameters) and qualitative (illustrative masterplan) evidence of the likely visual effects of the Amended Scheme.

1.10 It should be noted that no heritage assets were identified within 500 radius of the site and so no further heritage assessment will be included in this TVIA addendum. It is highly unlikely that the Amended Scheme would have an impact on heritage assets located at a distance beyond that 500m radius.

1.11 This report includes a summary of Savills methodology for assessment and a brief overview of updates to planning policy and guidance in chapter 2.0, a short description of updates to the site and its surroundings in chapter 3.0. This is followed by a description of the Amended Scheme and a brief assessment of its design quality in chapter 4.0. The townscape and visual assessment is presented in chapter 5.0, followed by the conclusions in chapter 6.0. Hayes Davidson methodology for the production of AVRs is included in Appendix A. Appendix B includes views assessed in the 2021 TVIA, which have been scoped out of this assessment of the Amended Scheme, as detailed in the methodology outlined in Chapter 2.0, for reference purposes.

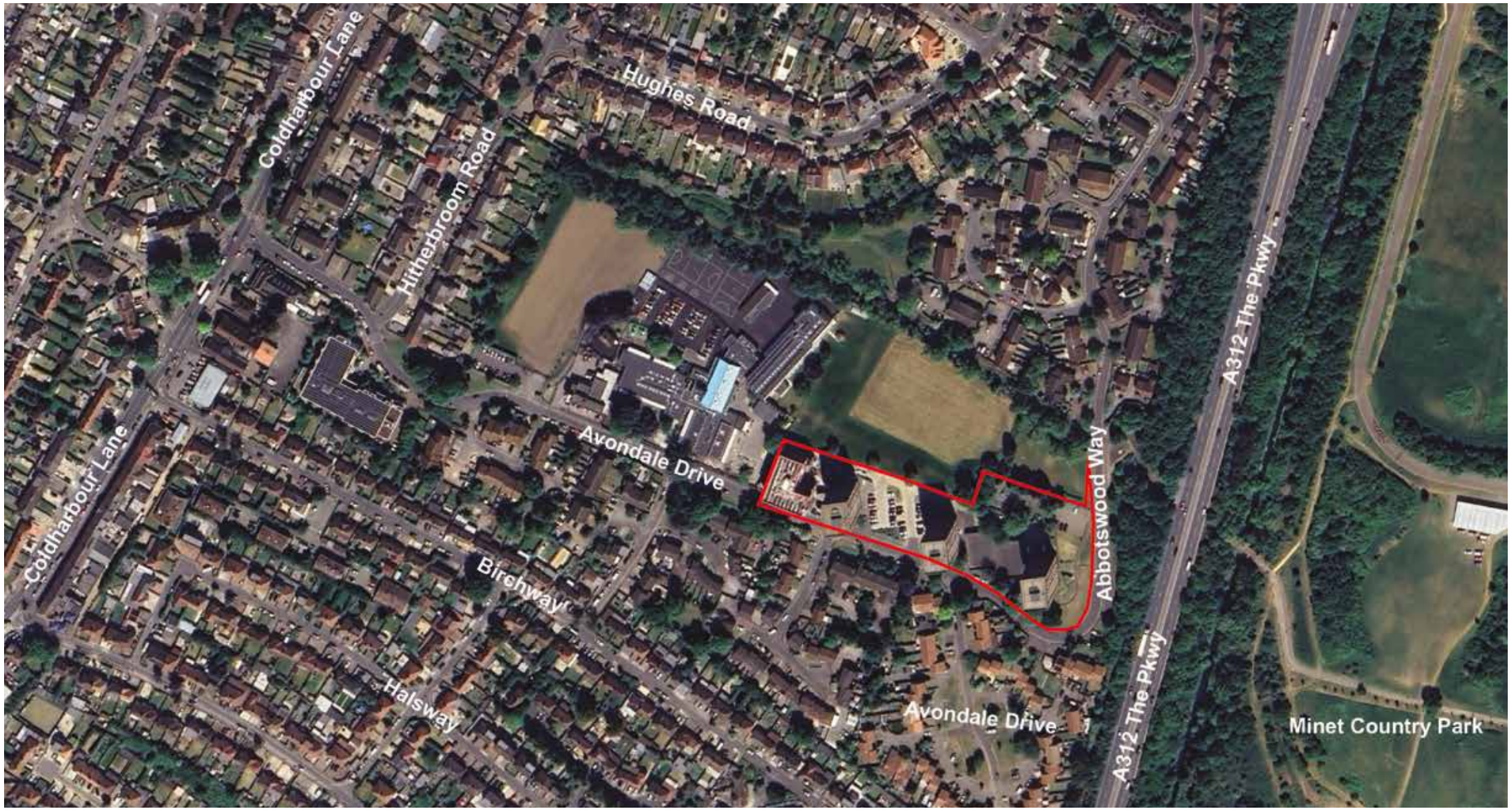


Figure 1.1: Aerial view of the site. Approximate site boundary is highlighted in red.

2. Methodology

Introduction

2.1 The assessment methodology for this TVIA Addendum accords with the assessment methodology developed by Savills Heritage and Townscape as set out in the 2021 TVIA report for the extant consent. This methodology is not replicated in this report which can be referenced in the 2021 TVIA prepared by Savills. In summary the assessment methodology is used to establish the likely effects of the Amended Scheme on the townscape as a whole, by assessing the effects on the visual amenity of people experiencing it through townscape views. This section includes updates since 2021 relevant to the assessment of the Amended Scheme, specifically updates to policy and guidance informing the assessments; selection of view locations; assumptions and limitations; and authorship.

Policy and guidance

2.2 This section contains a brief overview of aspects of national, London-wide and local planning policies and guidance that have been updated since 2021. It covers policies and guidance that are particularly relevant to the appearance and visual impact of the Amended Scheme and an assessment of the impact on townscape and views. The policy and guidance mentioned is publicly accessible information, so its text is not replicated in this report. For a full assessment against policy and guidance the reader is referred to the Planning Statement submitted by Lichfields as part of this application.

- Department for Levelling Up, Housing and Communities – *National Planning Policy Framework* (2024) (hereafter 'NPPF');. The updated NPPF has omitted the terms '*beautiful*' and '*beauty*' from Chapter 12, '*Achieving Well-Designed Places*,' instead emphasizing the importance of creating well-designed developments.

- Historic England, *Advice Note 4 (2nd Ed): Tall Buildings* (2022);

- The London Borough of Hillingdon, Local Plan is currently undergoing review. The call for views consultation (Regulation 18) completed on Monday 24 June 2024. As part of this review the council is publishing its Local Plan evidence as it is completed. This includes the:

- *Integrated Impact Assessment (IIA) Scoping Report* (2024)

- *Hillingdon Townscape and Character Study* (2023)

Baseline conditions

2.3 In order to get a full understanding of updates to the Site, its existing buildings and its role in the townscape in relation to national, regional and local policy and guidance, the site and its townscape context were revisited, and photographed as set out in chapter 3.0. The information gathered represents the baseline conditions against which the assessments are made, based on a site visit in July 2025.

2.4 The historical development of the site and its surroundings was researched and incorporated into the 2021 TVIA report. Since the historical development of the site remains unchanged, this addendum does not replicate the original information; however, recent developments are addressed in chapter 3.0. We have reviewed the heritage baseline for the site in the 2021 TVIA, which did not identify any heritage assets in proximity to the site. There have been no further additions to the heritage baseline since 2021.

Selection of townscape views

2.5 A site visit, map analysis and the use of computer models, specifically VU.CITY software, allowed for testing of the 12 viewpoints assessed in the 2021 TVIA and the identification of 6 appropriate viewpoints from which the Amended Scheme would be potentially visible, as presented in chapter 5.0. The selected views were agreed with London Borough of Hillingdon and represent a spread of close and medium distance views, where the silhouette and proposed architectural detailing of the Amended Scheme will be clearly visible.

2.6 The selected views are from publicly accessible locations and illustrate the urban relationships likely to arise between the Amended Scheme and other important elements of the townscape.

2.7 Each viewpoint location and view aims to represent the 'maximum exposure' of the Amended Scheme as well as its 'maximum conjunction' with sensitive elements in the built environment.

Assumptions and limitations

2.8 The methodology for assessing the townscape and visual effects in this TVIA includes some assumptions and limitations:

i. The views included in chapter 5.0 of the TVIA do not cover every possible view of the Amended Scheme, but were selected using professional judgement of where there are particular instances of townscape or visual sensitivity;

ii. The photorealistic rendered AVRs included in chapter 5.0 are a useful tool for assessment, but there is a degree of professional judgment made by the visualisation specialists in the artistic representation of materials and the effects of weather conditions, daylight and distance;

iii. Therefore, the reader is encouraged to always compare the photograph of the existing baseline condition (where available) with the 'proposed' model-shot.

iv. Assumptions have been made in the TVIA about the susceptibility of people to visual changes in the townscape, as well as on the types of people likely to experience particular views. These assumptions are based on professional judgment but are limited as the responses of individuals are varied and cannot all be covered in the assessment; and

v. This report is compiled using primary and secondary information derived from a variety of sources, only some of which have been directly examined. The assumption is made that this data, as well as that derived from other secondary sources, is reasonably accurate;

Authorship

2.9 This TVIA has been prepared by Savills Heritage and Townscape, a multidisciplinary consultancy with expertise in the areas of built heritage, townscape and archaeology. The consultants are employed by the applicant to provide independent and un-biased professional advice to the design team and to consider any beneficial or adverse aspects of the Amended Scheme based on best practice guidance in a balanced and transparent manner. Any qualitative aspects of the assessments that can be considered to a certain extent to be subjective are based on informed professional judgment based on the authors' experience. All consultants are highly qualified and trained professionals in the areas of planning, architecture, urban design, and the historic environment.

3. Site and Surroundings

Introduction

3.1 This chapter presents a brief summary of updates to the site and its surroundings since December 2021, accompanied by a selection of photographs taken in July 2025 that help illustrate changes to its character. The information gathered defines the updated baseline conditions and should be considered in conjunction with the 2021 TVIA baseline data. Aside from the development of key strategic sites in the extended context of Hayes town centre which are not visible from this site, the baseline conditions remain largely consistent. This is the basis against which the visual and townscape assessments are undertaken, using the same methodology outlined in chapter 2.0 of this report.

The site

3.2 Phase 1a of the outline planning consent (Planning Reference: 76551/APP/2021/4502) for the site is nearing completion, as observed during the recent site visit. This phase includes Block A, as indicated in the outline planning consent. Block A is an L-shaped, five-storey building located to the west of the site, with a street frontage on Avondale Drive (see figures 3.1 and 3.2). The building features a simple rectilinear design with a primary facing material of rich, variegated red multi-stock brick, with dark red brick accents around openings, at the corners, and to define the parapet. The window openings vary in proportion, adding visual interest to the façade; they are set back with brick reveals and equipped with light grey aluminium frames. Prominent on the street frontage are projecting balconies in a claret tone, complementing the rich brick material. Overall, during the site visit, it was observed that Phase 1a integrates well with the surrounding context and makes a positive contribution to the streetscape.

3.3 Since 2021, several former industrial sites located in close proximity to the town centre have been redeveloped primarily for residential use. These developments reflect the evolving character of Hayes within the broader context of the area.

Figure 3.1: Block A near completion on site (July 2025)

Figure 3.2: Block A looking east along Avondale Drive (July 2025)

4. Amended Scheme

Introduction

4.1 This chapter offers a brief description of the Amended Scheme, with particular emphasis on how townscape-related considerations have informed the final design, as well as an independent assessment of the design quality proposed. To illustrate this, only a small selection of images and plans produced by the architects are included. For a full description of the Amended Scheme the reader is referred to the Design and Access Statement (DAS) and the parameter and illustrative masterplan drawings submitted as part of this Section 73 application.

4.2 This Section 73 application seeks to revise specific conditions of the original planning consent (reference 76551/APP/2021/4502) including conditions 3 (approved plans), 4 (approved documents), 5 (land use/quantum), 6 (housing mix), 7 (phasing plan), 9 (density), and 10 (building heights).

4.3 The proposed Section 73 amendments encompass the following key changes to the outline area:

- An increase of 56 residential units overall, including an uplift of 33 affordable homes.
- Removal of the existing parking court and an increase in podium size, intended to enhance active frontages along Avondale Drive and improve site security.
- A revised height strategy to establish a lower-level frontage along Avondale Drive and mitigate overshadowing impacts on Hitherbroom Park.
- Deletion of vehicle access around Phase 1b, aimed at improving the quality of the public realm.
- Increased separation distances between Phases 1b and 2 to create a new public square, facilitating the relocation of play space to a safer, off-road position.

4.4 The extant consent was a hybrid planning permission, with a detailed element (Phase 1a) comprising a 30 home residential block (Block A) and an outline element (Phase 1b and Phase 2) with all matters reserved. Following the discharge of relevant planning conditions and the approval of a number on non-material amendment applications, Block A is now complete on site, with handover anticipated in September 2025.

Figure 4.1 : Illustrative masterplan Source: PRP DAS.

Massing, scale and form

4.5 The maximum parameters demonstrate, in quantitative terms, the highest volumes primarily situated toward the eastern part of the site, with a gradual reduction moving westward along Avondale Drive. The illustrative masterplan offers a visual representation of how the massing, scale, and form could be developed within these maximum parameters. The illustrative masterplan comprises seven distinct blocks and is segmented into two indicative phases. Phase 2 features three blocks ranging from two to six storeys, aligned along Avondale Drive. Phase 1b includes four blocks with heights of seven, eight, nine, and ten storeys. The tallest block, standing at ten storeys, is situated to the south of the site along Avondale Drive, marking the pedestrian entrance to Hitherbroom Park. To the north, there are eight and nine storey blocks overlooking Hitherbroom Park. Additionally, the easternmost block to the south steps down to seven storeys and faces Abbotswood Way. (Refer to Figures 4.1 and 4.2)

4.6 The eastern blocks in Phase 1b are interconnected, featuring a stepped massing design that creates visual distinction between them. These blocks are arranged around a raised podium aligned along a north-south axis with the park. The tallest building, located to the southeast of the site at ten storeys, marks the new public space and pedestrian route from the street to the park. The massing profile of the most eastern blocks is stepped and faceted to soften the massing along Abbotswood Way and add visual interest to break up the façade. The buildings are set back from the street to establish an engaging and active frontage. The lower blocks, situated in the central and western areas of the site, range from two to six storeys and are arranged in a uniform layout along Avondale Drive. The spaces between these blocks accommodate podium green spaces and provide views through the site toward the park. The proposed massing has been carefully designed to respond to the surrounding context and to harmonize with the existing townscape.

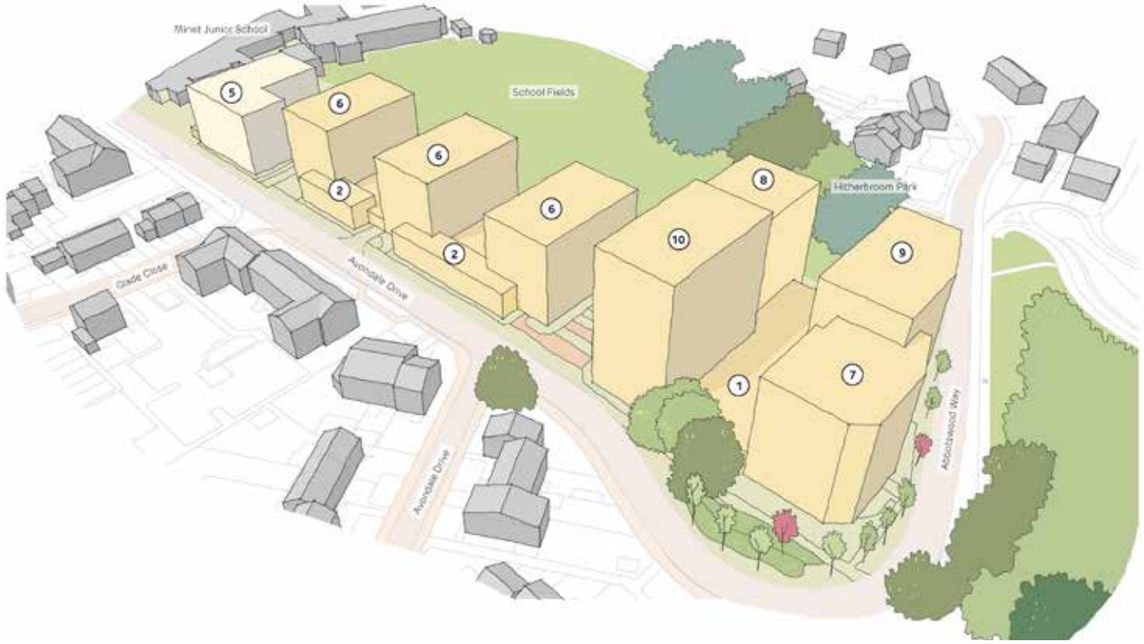


Figure 4.2 : Illustrative masterplan proposed building heights. Source: PRP DAS.

Architecture

4.7 The illustrative masterplan establishes guidelines aimed at minimizing the overall massing, form, and scale of the proposed blocks, as viewed internally and externally. This is achieved by positioning the taller elements, such as the ten-storey block, on the eastern portions of the site. Additionally, all blocks will incorporate a stepped design approach to help diminish visual mass and height from specific viewpoints.

4.8 The façade and articulation of this Section 73 application are indicative and a general guideline within the illustrative master plan and architectural

Figure 4.3 : Illustrative view of pedestrian route through to Hitherbroom Park. Source: PRP DAS.

strategy as set out in the DAS. The details of materials and articulation will come forward as part of the detailed design of these phases through future Reserved Matters Applications. Block A is now completed on site making a positive contribution to the streetscape in red/brown variegated brick, with brick decorative coursing around windows, corners and the parapet and projecting balconies activating the street. The architectural strategy indicates an approach to architectural detailing and materiality which will assimilate Phases 1b and 2 with Block A. Given the high architectural quality evidenced by Block A in View 11 and guided by the elevational strategies and precedents set out by the architects in the DAS, there is confidence that the Amended Scheme will achieve a comparable standard of quality and will enhance the townscape. (Refer to Figures 4.3, 4.4, 4.5 and 4.6)

Landscaping

4.9 The landscape strategy has been developed to integrate the site with its surroundings and ensure high quality communal amenity space for residents. The proposed landscape design will retain the existing trees. It will include enhancements to the edges of Hitherbroom Park and introduce a new public space / green route that runs through the development and connects to the park. This route will feature seating, informal play areas, cycle parking, trees, and low-level planting, serving as a green corridor link from Avondale Drive to the park and providing accessible space for residents, visitors, and the wider community. The private podiums will offer additional amenity and recreational space for residents and will incorporate soft landscaping. Boundary edges will be treated with soft landscape features to enhance the character of the surrounding environment (refer to figures 4.7).

Assessment of design quality

4.10 The Amended Scheme is the result of an iterative design process which took into account the sensitivity of the neighbouring streets close to the site, as well as the varied scales and architectural styles of the buildings immediately surrounding the site. The Amended Scheme has evolved through a process of consultation with the public and a series of preapplication meetings with LBH design and planning officers and the GLA.

4.11 By placing the taller elements towards the eastern part of the site, the proposed scheme will enhance the overall legibility of the area and of the Amended Scheme itself. Each proposed block will maximise the residential spaces, the distances from street elevation and the landscape to the north (Hitherbroom Park). The Amended Scheme will also improve the permeability and connection within the scheme and outside the scheme (in its surrounding context).

4.12 The overall arrangement of massing throughout the illustrative masterplan effectively creates visual breaks along the street frontage, facilitating views through the site toward the park and thereby integrating the Amended Scheme more cohesively into its surrounding context. The reorganisation of building layout has allowed for the inclusion of clearly defined public and private spaces for residents. The massing and height of buildings west of Avondale Drive have been rationalised to establish a consistent street datum that complements neighbouring residential streets and cul-de-sacs, such as Gade Close, Clivesdale Drive, and Abbey Close. The placement of the taller blocks were also carefully considered to enhance site legibility. The gradual variation in building heights from Blocks A through E aligns with the principles established by the existing planning consent; however, the positioning of the tallest ten-storey block has been adjusted to the south of the site to highlight the green corridor connection to the park and to facilitate future activation with the street through detailed design. Massing development prioritised views from surrounding streets on both the north and south sides of Avondale Drive, ensuring the design responds sensitively to its context. Regarding visual impact from further afield, Minet Country Park offers an open vantage point that provides sightlines toward the site, especially in view 5 (discussed in Chapter 5), where the larger, taller blocks are visible. To ensure these appear cohesive from this view location, the design introduces stepped massing profiles around an open podium space, breaking up the overall form and enhancing legibility and visual distinction between the blocks. In conclusion, the carefully articulated form and massing of the Amended Scheme demonstrate a respectful approach to surrounding sensitivities, with each side of the masterplan responding thoughtfully to its neighbouring context.

Figure 4.4 : Architectural precedents to inform detailed design of the scheme. Source: PRP DAS.

Figure 4.5 : Illustrative view of the proposed western blocks addressing Avondale Drive street frontage and part of proposed ten storey eastern blocks in the background. Source: PRP DAS.

4.13 Assessing the design mitigations (Stepped massing of two to six storeys along Avondale Drive; repositioning of the ten-storey building to the south of the site; and tiered massing of taller buildings to the east of the site), of the Amended Scheme against the criteria/ principles that are set out in Policy D9 of the London Plan; it should be noted that:

- The scale and massing, will improve the legibility and wayfinding in the area and will reinforce the spatial hierarchy of the local and wider context;
- The massing will not cause any harm for its surrounding townscape and context, and will positively contribute to the character of the overall townscape;
- The design of the Amended Scheme, will improve the public realm and connectivity in and around the scheme;
- As it is discussed in Chapter 5.0, and in alignment with the criteria in Policy D9 of the London Plan, the proposed design will positively contribute to the existing and emerging skyline in long-range views. In mid-range views, it will make a positive contribution to the local townscape in terms of legibility and proportions. In immediate views the proposed design will have a direct relationship with the street, maintaining the pedestrian scale, character and vitality of the street. In addition, it will create a gradual shift and transition in scale and height.

4.14 In summary, the proposed layout and massing of the Amended Scheme have been carefully reviewed and refined to enhance the surrounding streets and open spaces. The now completed Phase 1b demonstrates how an elegant and distinct, yet simple design can be delivered on the site. The elevational strategies set out in the DAS indicate that the architectural design quality of the illustrative masterplan will be high, which is a requirement for tall buildings owing to their potential effects on the surrounding townscape. The quality of the completed phase, along with the illustrative materials included, provide confidence that the outline elements of the application will be of similar high quality when they come to be determined during the Reserved Matters application stages.

Figure 4.6: Illustrative view from Hitherbroom Park looking towards the proposed eastern blocks. Source: PRP DAS.

Figure 4.7 : Illustrative landscape strategy. Source: PRP DAS.

5. Visual and Townscape Assessment

Introduction

5.1 This chapter presents the visual effects of the Amended Scheme on the visual amenity of visual receptors (people experiencing the views) and the surrounding townscape. In order to assess the visual effects, the consultants have selected 6 townscape viewpoint locations for assessment (see figure 5.1), based on the methodology described in chapter 2.0.

5.2 The consultants have assessed the visual effects of the Amended Scheme on the local environment, making use of the quantitative (maximum parameters) and qualitative (illustrative masterplan) illustration as provided in the AVRs presented in this chapter. The written assessments, in the following pages, are based on professional judgement.

5.3 The visual assessments are carried out by comparing an 'existing' photograph of the baseline condition with a 'proposed' image of the maximum parameters and illustrative masterplan of the Amended Scheme.

5.4 Following guidance, unlike assessments that form part of an Environmental Statement (ES) where these follow a complex procedure based on significance tables, the assessments in this TVIA are written in a simple and proportionate narrative manner.

5.5 The proposed views are presented as a verified Accurate Visual Representation (AVR) produced by visualization specialists Hayes Davidson. Their methodology for the production of views is at Appendix A. The AVRs are presented as blue wirelines showing the maximum parameters of the Amended Scheme and a white chalk model representing the illustrative masterplan.

5.6 Each of the views are presented and assessed according to our methodology as two images:

i. '*Existing*': a description of the existing view in its baseline condition, which seeks to evaluate its townscape qualities and the visual amenity;

ii. '*Proposed*': a description of the Amended Scheme as seen in the view and how this will change the visual amenity of people;

5.7 All wirelines (proposed) are depicted as solid blue wirelines where visible from the viewpoint location and as dotted wirelines where the proposed (or part thereof) are occluded by built form and trees in the foreground and hence not visible.

5.8 Due to the timescales of the project, the photography included in the assessment was taken in August 2025, when the trees are in leaf and therefore do not represent the worst case scenario. If a view is particularly effected by vegetation and trees in relation to visibility towards the site, this will be addressed in the view description text.

The Views

5.9 The 6 viewpoints included are listed below corresponding the numbering as per the 2021 TVIA:

View 2: Abbotswood Way and Abbey Close junction, looking south-west

View 5: Minet Country Park, looking south-west

View 6: Avondale Drive, looking west

View 7: Avondale Drive, looking west

View 8: Avondale Drive, looking north-west

View 11: Avondale Drive, looking east

Tall Buildings Assessment

5.10 Policy D9 of the London Plan identifies buildings that are over six storeys or 18m tall as tall buildings. Policy DHMB10 of the Hillingdon Local Plan refers to high buildings and structures as those 'substantially taller than their surroundings'. Phase 1b of the Amended Scheme with ranges from seven to ten storeys fall into these categories and would therefore be defined as tall buildings under policy. The application site is outside of Hayes towns centre (a location that the council has identified as suitable for tall buildings), however it should be acknowledged that the three existing buildings on site currently stand at thirteen storeys, which by the same policy definition are tall buildings. The proposed tallest block at ten storeys (approximately + 64m AOD) within the illustrative masterplan is comparable in height to the three existing thirteen-storey buildings (approximately +65m AOD) on site. The assessment below should be read in conjunction with the visual impact assessment, above, and the proposed Amended Scheme and assessment (chapter 5).

5.11 In terms of heritage impacts, there are no heritage assets within a 500m radius, and therefore the Amended Scheme is very unlikely to have an impact on any heritage assets, despite including tall buildings.

5.12 Considering the visual impact assessment, above, the Amended Scheme appears as a positive contribution and distinct improvement to the current condition in close range views (6, 7 and 11), through clear activation of the street and creating a sense of enclosure along Avondale Drive. In medium range views (2 and 8), the proposed development's visibility is more limited, due to the street composition and urban grain of the surrounding area. Elements of the proposed development, often the taller elements, appear amongst the existing houses and trees, creating a high quality backdrop that works successfully with the existing context and offers a distinct improvement from what is currently there. In the longer distance views (5) the Amended Scheme is seen as a considered composition, where each Block, where visible, is individually legible. The Design and Access Statement (DAS) and the illustrative masterplans, as well as elevational strategies proposed to come forward as part of detailed design through reserved matters application will ensure that the elevations that will be seen from further distances, will be articulated in high quality materials.

5.13 The are no visual cumulative effects, as there are no emerging schemes that will be visible in conjunction with the proposed development.

Townscape, Visual and Tall building Assessment Conclusion

5.14 The Amended Scheme will appear as a great improvement to the existing situation in close range views, through the high quality details, creation of enclosure along Avondale Drive and improved edge conditions around the site.

5.15 The Amended Scheme will bring significant improvements to the townscape that forms the immediate context of the site, through the replacement of the existing poor quality buildings with a considered, high quality development and an improved relationship through activation, legibility and permeability at ground level. In respect of design considerations, the Amended Scheme is in line with the statutory duties relating policies, including London Plan policies (including policy D9) and London Borough of Hillingdon Policy DMHB10.

Comparison with Extant 2022 Outline Permission Conclusions

5.16 The visual effects of the Amended Scheme assessed in this TVIA Addendum are generally aligned with those of the Consented Scheme assessed in the 2021 HTVIA. While some revisions are proposed in height distribution and massing such as repositioning the ten-storey block to the south of the site on Avondale Drive, along with a lower, stepped massing frontage of two to six storeys and tiered massing of the easternmost blocks, these changes are regarded as positive. They improve urban design, site layout, the legibility of pedestrian routes to Hitherbroom Park, and the overall form and massing as observed from both close and wider viewpoints. Additionally, these adjustments are considered an enhancement of the 2022 extant consent.

Key

- Site
- Grade II
- Local list
- Nestles Conservation Area
- View point

Figure 5.1: Map with 6 proposed viewpoints. Approximate site boundary highlighted in red. © Crown copyright and database rights (2025) OS Licence 100035409.

VIEW 2 - EXISTING : ABBOTSWOOD WAY AND ABBEY CLOSE JUNCTION, LOOKING SOUTH-WEST

Existing:

This view has been taken from Abbotswood Way looking south towards the site. A leafy streetscape is presented in this view. To the right of the image semi-detached houses of Abbotswood Way are seen, featuring pitched, tiled roofs and brick facades, dating from the late 20th century. The foreground and most of the left side of the image is dominated by the street and the grass verges, vegetation and mature tree that line Abbotswood Way. Centrally, between the mature cherry tree and the terrace, the upper parts of one of the existing towers on the site can be seen, rising to a similar apparent height as the elements in the foreground. In winter it is likely that the visibility to the buildings on the site would increase.

The visual receptors are likely to be local residents as well as general public visiting the park.

Viewpoint map

VIEW 2 - PROPOSED (AMENDED SCHEME) : ABBOTSWOOD WAY AND ABBEY CLOSE JUNCTION, LOOKING SOUTH-WEST

Proposed:

The maximum parameters of the Amended Scheme is outlined in blue wireline with the illustrative masterplan represented in white chalk model. The maximum parameters are located at the easternmost point of the site, gradually decreasing toward the west, where the parameters indicated by the dotted blue wireline are obscured by intervening buildings. The illustrative masterplan demonstrates how the building massing can come forward within these maximum parameters. From this position only part of façade of the most eastern blocks (Phase 1b) will be visible, rising to nine storeys, as well as a small section of a block, partially visible centrally. In winter months some more of the Amended Scheme may be visible from this location. Blocks G and H rise to a similar apparent height as the existing towers on the site. The visible parts of Blocks H and G along Abbotswood Way will create a better sense of enclosure at the middle distance of this view.

V.2

VIEW 5 - EXISTING : MINET COUNTRY PARK, LOOKING SOUTH-WEST

Existing:

This view is located to the northeast of the site, in Minet Country Park. The main aspect in this view is the landscape of the park itself, with grass in the foreground and middle ground and trees terminating the view and designating the park boundary. The three towers on the site can be seen centrally in the image, rising above the tree line as three completely separate volumes. In the far distance, to the left of the towers, the tops of buildings and some cranes are visible, towards Hayes town centre. This view will not be significantly altered during the winter months.

The visual receptors in this view are likely to be the general public visiting the park and the local residents of the wider area.

Viewpoint map

VIEW 5 - PROPOSED (AMENDED SCHEME) : MINET COUNTRY PARK, LOOKING SOUTH-WEST

Proposed:

The maximum parameters of the Amended Scheme are depicted with a blue wireline outline, while the illustrative masterplan is represented as a white chalk model. The maximum parameters are located at the easternmost point of the site, gradually decreasing toward the west. The illustrative masterplan demonstrates how the building massing can come forward within these maximum parameters. The Amended Scheme is positioned centrally within the view, with the upper storeys of the easternmost blocks in Phase 1b ranging from eight to ten storeys visible obliquely. Additionally, the top floors of the six-storey blocks in Phase 2 are partially visible above the tree line. In this view, no single block appears dominant due to its storey height. Phase 1b is perceived as a collection of blocks with varying heights, creating visual distinction and allowing for views between them. The varied materials, colour palette, breakdown and fenestration of the blocks is detailed in the design principles of the illustrative masterplan, which will ensure the high quality of the scheme, help reduce the overall massing and articulate the Amended Scheme. As seen from here, the Amended Scheme gives the site a sense of legibility which it currently lacks, and will improve the architectural outlook.

V.5

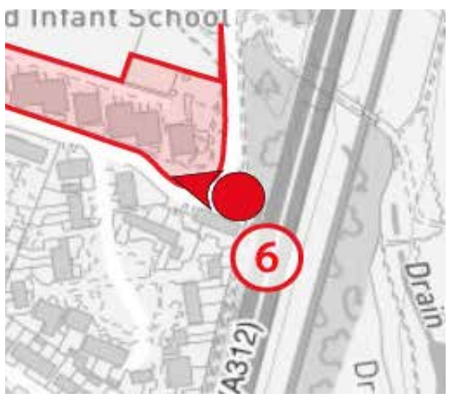
VIEW 6 - EXISTING : AVONDALE DRIVE, LOOKING WEST

Existing:

This viewpoint is located on the bend of Avondale Drive, where it meets Abbotswood Way, adjacent to the site, and faces back along Avondale Drive. From this position the base and lower floors of the most eastern existing tower on the site appears prominent, revealing the lack of relationship of the existing buildings with the surrounding townscape. The two mature trees appear centrally in the image, occluding some of the façade of the tower, as well as the other buildings on the site. To the left, a small section of one of the houses on Avondale Drive cul-de-sac is also visible behind a fence and surrounded by mature vegetation. In winter the visibility of buildings, including more buildings on the site, is likely to be greater.

The visual receptors in this view are likely to be the local residents, commuters of the area, and the visitors of the Minet Country Park and Minet School.

Viewpoint map



VIEW 6 - PROPOSED (AMENDED SCHEME) : AVONDALE DRIVE, LOOKING WEST

Proposed:

The maximum parameters of the Amended Scheme are outlined by the blue wireline, with the illustrative masterplan depicted in the white chalk model. The maximum parameters are located at the easternmost point of the site, gradually decreasing toward the west, where the parameters indicated by the dotted blue wireline are obscured by intervening landscape. The illustrative masterplan demonstrates how the building massing can come forward within these maximum parameters. The street-facing blocks of Phase 1b will be primarily visible from this viewpoint, located to the right of the image. The trees partially obscure the separation between these blocks, which will form a podium greenspace. The tallest building, standing at ten storeys, will serve as a visual marker for the pedestrian connection to Hitherbroom Park through the site to the street. The bases of some other blocks will also be visible from this viewpoint; however, during summer months, much of the scheme will be screened by trees. The architectural quality, materials, and landscaping, as outlined in the scheme's design principles, will be evident from this perspective and will significantly enhance the townscape by establishing a strong active frontage, improving the sense of enclosure, and increasing site legibility.

V.6

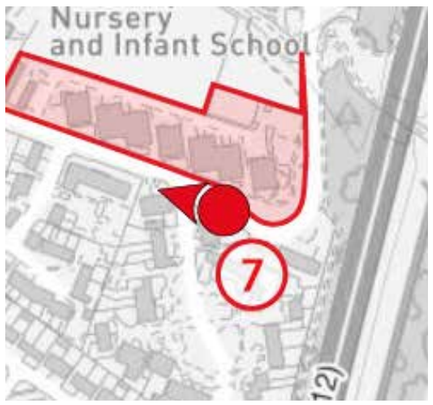
VIEW 7 - EXISTING : AVONDALE DRIVE, LOOKING WEST

Existing:

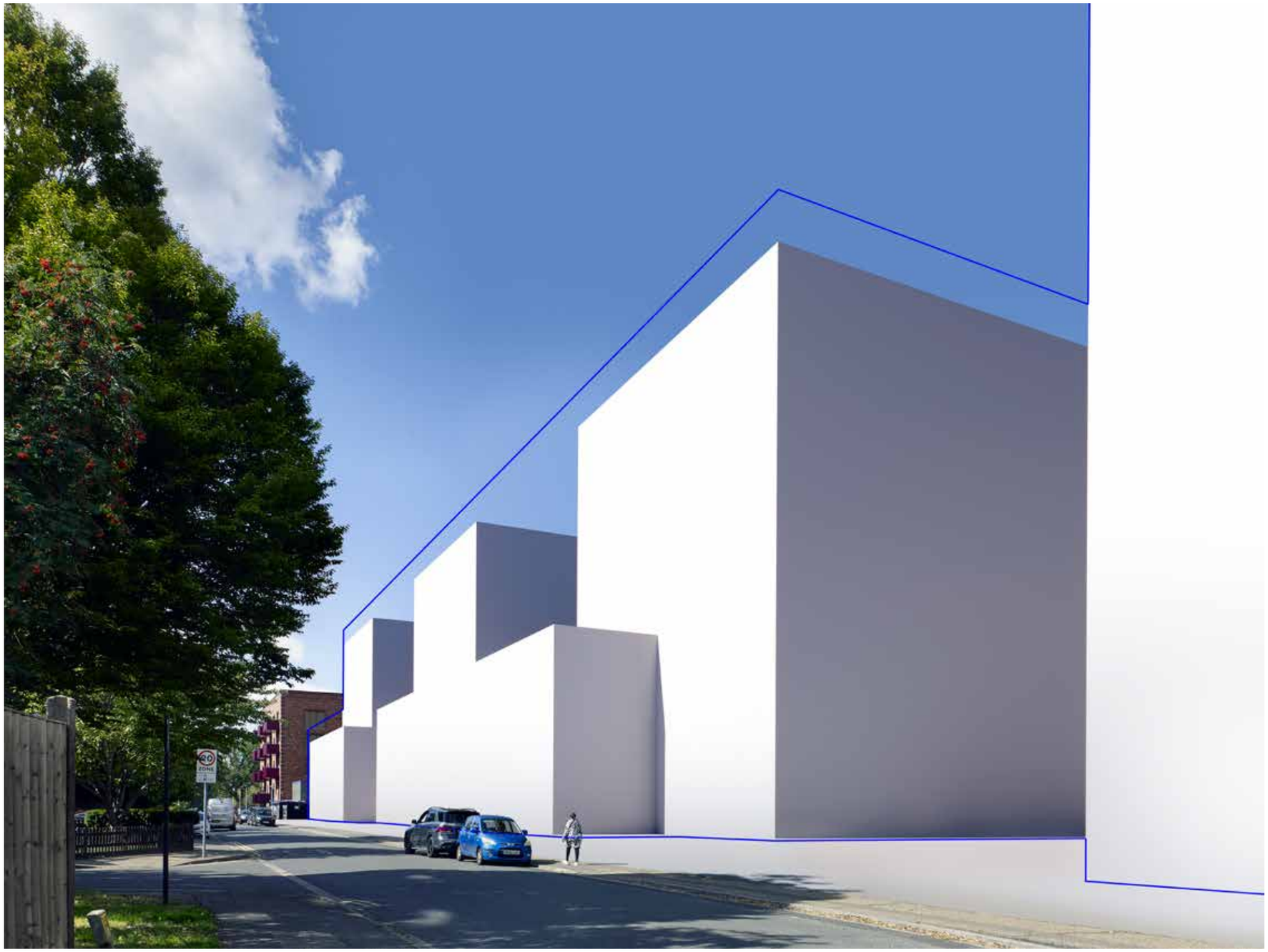
This view is situated on the south side of the site, on Avondale Drive, and faces west. Mature street trees line both sides of the street. To the right, on the other side of the street is one of the existing car park buildings, in between the towers (one tower is out of shot, to the right). The most dominant elements in this view are the middle and western towers of the site, rising significantly higher than the surrounding context. The lack of active frontages on the site is also evident in this view. Phase 1a is partially visible in the background its variegated brick and projecting balconies makes a positive contribution to the streetscape.

The visual receptors in this view include the local residents, visitors of the school as well as visitors of the Minet Country Park.

Viewpoint map



VIEW 7 - PROPOSED (AMENDED SCHEME) : AVONDALE DRIVE, LOOKING WEST



Proposed:

This view enables an assessment of the Amended Scheme in relation to Phase 1a, which has recently been completed on-site and is visible in the background. The maximum parameters of the Amended Scheme are illustrated with blue wireline, while the illustrative masterplan is represented by a white chalk model. The maximum parameters are visible gradually decreasing towards the west. The illustrative masterplan demonstrates how the building massing can come forward within these maximum parameters. To the right of the image, the corner of the lower floors of the ten-storey marker building can be seen, indicating the pedestrian route to the park. The six-storey blocks of Phase 2 are prominently featured, aligning with the street from the foreground to the background and demonstrating their relative scale to Phase 1a. The breaks between blocks add interest to the streetscape and will allow views through. The projecting two-storey base serves to integrate the mid-rise six-storey massing into the street context, consistent with adjacent residential developments. Based on the high architectural quality of Phase 1a, as evidenced in this view, and guided by the design principles established by the architects, there is confidence that the Amended Scheme will achieve a comparable standard of quality and significantly enhance the townscape. Additionally, the scheme aims to improve the overall sense of place by creating active frontages, enhancing legibility, and increasing permeability within and around the site.

V.7

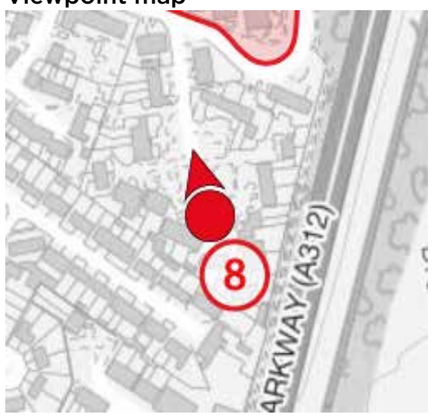
VIEW 8 - EXISTING : AVONDALE DRIVE, LOOKING NORTH-WEST

Existing:

This view is located to the south of the site, on the cul-de-sac section of Avondale Drive. A residential outlook is revealed in this view, with a layout consistent with late 20th century urban design principles, creating large grass verges, limited active frontages and a lack of sense of enclosure along the street edge. The terraces rise to two storeys with pitched roofs and appear in brown brick. The two most eastern residential towers of the site are visible above the ridgeline and trees to the right and centre of the image, in the background.

Visual receptors are likely to include local residents.

Viewpoint map



VIEW 8 - PROPOSED (AMENDED SCHEME) : AVONDALE DRIVE, LOOKING NORTH-WEST

Proposed:

The maximum parameters of the Amended Scheme is depicted as a blue wireline with the illustrative masterplan sitting within it represented as a white chalk model. The maximum parameters are located at the easternmost point of the site, gradually decreasing toward the west, where the parameters indicated by the dotted blue wireline are obscured by intervening buildings and landscape. The illustrative masterplan demonstrates how the building massing can come forward within these maximum parameters. From this distance in the background the upper floors of the six storey blocks of Phase 2 are partially visible in the middle and the upper floors of street fronting blocks in Phase 1B (to the right of the view) will be seen. The ten storey marker block will be perceived at a height consistent with the existing towers on the site. The remaining blocks are comparatively lower in height, providing a transition between the tallest block and the surrounding context. The variation in height and massing will contribute to visual interest in this view. The architectural approach will be evident here, as reflected in the design principles of the illustrative masterplan. The quality of architecture and articulation is expected to enhance the existing environment and serve as a positive contribution to the townscape in this location.

V.8

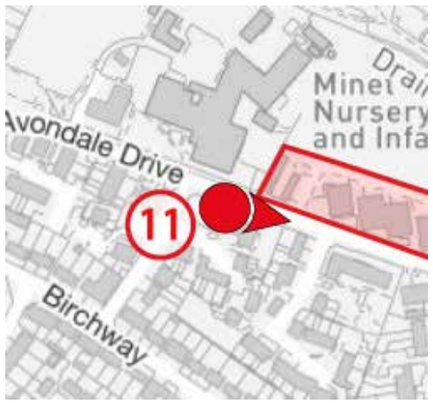
VIEW 11 - EXISTING : AVONDALE DRIVE, LOOKING EAST

Existing:

This viewpoint is located on Avondale Drive, to the west of the site, facing back along Avondale Drive., The main outlook is Avondale Drive and the mature trees that line it on either side. To the left of the image, the fence of the Minet School can be seen, covered in climber plants. On the right, the rear elevations of the residential blocks at Gade Close are partly occluded by dense vegetation, set beyond a grass verge. The middle ground is punctuated by the flank elevation of Phase 1a which has recently been completely on site. It is a five storey block which partially screens the existing tower blocks staggered behind it. The materiality, fenestration and balcony treatment of Phase 1a are clearly discernible in this view making a positive contribution in terms of architecturally quality and active frontage to the streetscape.

Visual receptors include local residents and school children and their carers.

Viewpoint map



VIEW 11 - PROPOSED (AMENDED SCHEME) : AVONDALE DRIVE, LOOKING EAST

Proposed:

The maximum parameters are located at the easternmost point of the site, gradually decreasing toward the west, where the parameters indicated by the dotted blue wireline are obscured by intervening buildings, in this view Phase 1a. The illustrative masterplan demonstrates how the building massing can come forward within these maximum parameters. As the view extends along Avondale Drive into the background, partial visibility of the street frontage along Phase 2 and the tallest ten-storey block in Phase 1b can be observed. The stepped arrangement of Phase 2 along the street frontage appears proportionate to Phase 1a. In the distance, the Amended Scheme terminates with a ten-storey block that rises to a similar height as the existing towers on the site; however, no individual block predominates in this view. Given the high architectural quality demonstrated in Phase 1a and guided by the design principles established by the architects, there is confidence that the Amended Scheme will achieve a comparable standard of quality and will enhance the townscape. Furthermore, the scheme seeks to improve the overall sense of place by creating active frontages, enhancing legibility, and increasing permeability within and around the site.

V.11

6. Conclusions

6.1 This TVIA was prepared by Savills Heritage and Townscape to assess the effects of the proposed development on the visual amenity of people experiencing views of Avondale Drive, Hayes, LB Hillingdon, where the site lies.

6.2 The assessments have taken into account the effects on heritage receptors, with a radius of 500m from the site considered and no heritage assets found. In light of this it is considered that the Amended Scheme would cause no harm to any heritage assets or their heritage significance. The assessments have taken into account the effects on the townscape resource as a whole through changes to a the views included in this assessment.

6.3 This document should be read alongside the Planning Statement Addendum produced by Lichfields, as well as the Design and Access Statement Addendum and plans produced by PRP and landscape strategy prepared by Liz Lake Associates.

6.4 The proposed designs were described and independently assessed for their effects on the immediate and wider townscape and it was found that they have been sensitively designed, taking into consideration their effects on the surrounding context. Overall, the proposed designs are considered to be of a high quality and will be beneficial to their immediate townscape. It should be noted that the proposed tallest block at ten storeys (approximately + 64m AOD) within the illustrative masterplan is comparable in height to the three existing thirteen-storey buildings (approximately + 65m AOD) on site.

6.5 A total of 6 townscape views were considered and assessed in detail, comparing the 'existing' baseline condition with the 'proposed' condition after the proposed development is completed. No cumulative views were included as there were no cumulative schemes identified near the site.

6.6 The majority of the assessments of the visual effects concluded that the introduction of the Amended Scheme would contribute positively to the existing townscape due to its considered scale and massing and illustrative material demonstrating the proposed approach for high quality architecture, public realm and landscaping. The completed Block A represents the onsite delivery of a high quality building which makes a positive contribution to the townscape, the proposed elevational strategy for Phases 1b and 2 to assimilate with Block A instils confidence that the Amended Scheme will be delivered to a comparable quality. In close range views the public realm improvements and architectural detailing (shown in DAS for illustrative masterplan) will be appreciated, while the layout and massing of the scheme will improve the legibility and permeability in and around the site. In medium range views the proposed development is less apparent due to the urban fabric of the area, but where visible will appear as a positive addition to the townscape through its high quality architecture and proposed materials (as shown in the DAS). In the longer distance views, such as those from Minet Country Park, the proposed development appears as a considered composition, where the massing and materials mitigate walling effects and contribute positively in the townscape and replacing the poor quality towers currently on site. Overall, it was found that the proposed development would have a positive effect on visual and townscape receptors.

6.7 Given the heritage, townscape and visual effects assessed, it is considered that the "tall" elements proposed as part of the development comply with Policy D9 of the London Plan and with policy DMHB10 of Hillingdon's Local Plan. The visual impact assessment demonstrates that the Amended Scheme does not adversely impact any of the assessed views. Additionally, the design quality assessment affirms that the scheme, including the taller elements, demonstrates design excellence through its form, proportions, and elevational strategies. These strategies and precedents provide a clear framework for the detailed design phase to be developed subsequently.

Appendix A - Hayes Davidson Methodology

HAYES DAVIDSON

AN202_Avondale Drive

Higgins Group PLC 23/09/2025

1. Qualifications

1.1. Hayes Davidson was founded in 1989 to specialise in computer aided architectural illustration. The company has a team which deals exclusively in the creation of three dimensional digital models and the representation of buildings and cities. The team is overseen by Joint Managing Partners David Bullock and Neil Hughes, and is coordinated on a day to day basis by partners all of whom have architectural, technical and artistic experience. A Planning and/or Technical Director oversee all projects where geometric definition and accuracy is required. Hayes Davidson has been invited to sit on judging panels for a number of architectural illustration awards, and lecture on computer aided illustration techniques, perception and three dimensional representation.

1.2. Hayes Davidson is an employee-owned studio based in Paddington founded by Alan Davidson. Alan Davidson pioneered the original verification process for illustrative planning imagery and provided key evidence at inquiry for many of London's high profile schemes. His legacy, an eye for detail and keen understanding of visual perception continues as a strong guiding principle in every project undertaken by the team.

1.3. Hayes Davidson is considered to be one of the most experienced architectural computer imaging companies working in the UK having produced over 40,000 'virtual' or 'computer aided' images since 1989. The work of Hayes Davidson has been acknowledged as pioneering; advancing the use of computer technologies in the representation of buildings. The work of the studio has been widely published. Some of Hayes Davidson's computer generated artwork forms part of the Royal Institute of British Architects Drawings Collection.

1.4. The following reference for Hayes Davidson comes from Dr. Neil Bingham, Assistant Curator of the Royal Institute of British Architects Drawings Collection:

1.5. "The RIBA Drawings Collection was established at the foundation of the RIBA in 1834, now holds an estimated 3/4 million drawings, and is considered one of the finest architectural collections in the world. Since 1994, the RIBA has been acquiring the work of Hayes Davidson. The Drawings Collection recognise their work as representing some of the highest quality and most important architectural illustration of the late 20th Century."

1.6. Hayes Davidson has produced evidence for the Heron Tower, Doon Street Tower, 1+20 Blackfriars, Newcastle Quayside, High Holborn and the London Bridge Tower Public Inquiries. On many occasions the material produced by Hayes Davidson has been accepted and praised by the Inquiry.

2. Work commissioned

2.1. Hayes Davidson were commissioned by Higgins Group PLC.

2.2. All drawn and digital information regarding the proposed development was supplied to Hayes Davidson in digital format by PRP Architects.

2.3. The number of viewpoints selected was considered proportionate to the scale of the development, Sensitivity of the receptors and Magnitude of potential landscape and visual change.

3. Choice of simulation technique and media employed

3.1. It is important to emphasise that no media can currently reproduce the human experience of viewing a scene. There is no method of analysis or representation that will accurately summarise every lighting, material, social, sensory or climatic condition.

3.2. A photomontage is the superimposition of an image onto a photograph for the purpose of creating a realistic representation of proposed or potential changes to a view. Printed photomontage allows the highest resolution and allows the eye to see the greatest detail. In this way it starts to simulate the effect of looking at a view from a single position.

3.3. All photomontages produced by Hayes Davidson are Type 4 Visualisations, which are described as the 'most sophisticated, in terms of equipment, processing and presentation' by the Landscape Insititute Technical Guidance Note of 2019 (Paragraph 3.5.2). The objective of Type 4 visualisation is to present a printed image which gives a realistic impression of scale and detail (4.5.10) and represents the highest level of accuracy and verifiability for use in the most demanding of situations (Para 4.1.1).

3.4. The Accurate Visual Representation (AVR) level for each image was selected based on what was required to best illustrate the proposal, as determined by the visibility and/or proximity to the scheme (LI Para 6.4.1).

3.5. Setting aside time of day and year and local climatic conditions, the different aspects of a building that contribute to its aesthetic appearance can be summarised as follows: (For the purpose of simplicity we will disregard the speed of walking and social and other sensory influences but these are also relevant).

1. proportion (height, width)
2. distance/depth from viewer
3. outline and definition of building edges
4. the viewers 360º awareness of the surroundings
5. position in view
6. the effect of light on and the nature of the buildings materials
7. night lighting
8. nature of surrounding buildings/structures (shadowing and reflection)

3.6. Not all simulation techniques can be verified and where detailed analysis of materials and their behaviour to light are to be considered, no wholly objective analysis method is possible, and the architect and Hayes Davidson work together to apply subjective judgement.

4. Photography

4.1. All photography was carried out by a professional architectural photographer using the following equipment:

Camera: Arca Swiss 69 F-Line Metric, PhaseOne P45

Lens: Rodenstock Apo-Sironar Digital 35mm

4.2. The images were processed by the photographer to achieve results that best reflected the baseline conditions of each scene at the time of the photography and includes the extent of the site and sufficient context. Photography was secured in good, clear weather conditions wherever reasonably possible (Appendix 4 and GLVIA3 para 8.22). Where a single image is unable to demonstrate the extent of the proposal under consideration and its relevant landscape context, a Multi-Panel image was required.

4.3. Each scene was recorded using a survey marker to accurately identify the view location. A plumb line was used to ensure that the centre of the camera was directly over the surveyed viewing position at a height of 1.60 metres. A log was kept of the time and date that each photograph was taken so that lighting conditions could be recreated in the computer model.

4.4. There is no single definitive camera and lens format that is suitable for all photomontage planning work. Choices need to be made with care and clearly explained through method statement/annotation. Townscape photography taken with a 40º lens (50mm lens/35mm camera) is most often likely to be inadequate for purpose and is not recommended. To insist, as some do, that only 40º lenses should be used is unrealistic. If chosen appropriately, correctly annotated, and with professional understanding by those assessing, there is little to be lost by using wider angle lenses (up to 70º), as this can add peripheral information that more closely reflects our 'experience' of a scene. Departures from FFS + 50mm FL are accepted provided that the reasoning for this departure can be explained and agreed with the competent authority (LI Para 4.5.3).

4.5. Very wide angle single lens views can minimise impact and as such this technique is also inappropriate. Through a careful choice of lenses that allow wider fields of view, townscape is able to be better assessed. The use of hybrid lenses/photographic solutions (ref. Multi-Lens section 7.3) ensures that distortion issues can be minimised for panoramic images.

4.6. Hayes Davidson recommends that all parties are mindful that Environmental Statement photomontage should be used as a complement to site based assessment.

fig 1a The camera

fig 1b The camera in position

fig 2 Example of processed image

5. Surveying

5.1. Hayes Davidson identified key static points such as building corners, garden features and fencing within each photograph. A chartered measured engineering surveying company surveyed the points as described below and the information was issued digitally. The surveyors identified 3 or 4 objects within the scene, which fell along the horizon line of each photograph. Numbered camera positions were surveyed using line of sight surveying and aligned to the local site grid in easting, northing and elevation supplied by the architect and to the Ordnance Survey National Grid (OSGB36) in easting and northing, and in elevation to the Ordnance Survey Datum (OSD) using the OSTN02 GPS transformation.

5.2. A line of sight, two station baseline is established, coordinated and levelled utilising GPS observations.

5.3. The survey control stations were observed by GPS observations and traversed from GPS-observed points. The Ordnance Survey OSNET active GPS correction service was used to transform the data to the Ordnance Survey National Grid and Datum and is accurate in both position and height. Relative height accuracies comparable to geodetic levelling can be achieved, without visiting any existing OS bench marks. Finally, these positions are transformed to the local grid and to a 'pseudo' OS grid which has a scale factor of 1.0.

5.4. A Total Station capable of measuring horizontal and vertical angle observations combined with an internal co-axial non contact distance measuring device accurately measured and stored the three dimensional coordinates of the key features from the control stations.

5.5. The required horizon line within the image is established using the horizontal collimation of the Total Station. The horizon line coordinates were surveyed and stored.

5.6. Surveying equipment used:

Views 02, 06-11:

Total Station - Leica Nova TS60 Total Station with a 0.5" angle measuring accuracy and 2mm and 2ppm distance measuring accuracy.

GPS / GNSS System - Leica Viva GS14

View 05:

Total Station - GeoMax Zoom 90 Robotic total station with reflectorless measurements up to 1,000 metres and 3mm + 2ppm distance measuring accuracy.

GPS / GNSS System - GeoMax Zenith 40 GNSS receiver

5.7. Surveying equipment allows the camera location and fixed target points in the view to be calculated down to centimetre accuracy. By correctly matching the 3D model camera position and geometry of the view to the original photograph using pixel level data, highly accurate, survey-verified visualisations are produced (LI 11.4).

5.8. Processed Data Delivery:

Coordinate and level data in Excel file format DWG and JPG files detailing the observed points and the horizon line.

fig 3a AutoCAD DWG showing marked up surveyed context points

Project name: _____ Date: _____

Job number: _____ View reference: _____

Surveyor name: _____

		OS Grid Co-ordinates			
	Reference	Easting	Northing	Elevation	Accuracy (A-D)
Camera Position	V01	518269.327	169202.138	9.229	A
Surveyor Viewpoint 1	1	518276.699	169202.461	9.179	A
Surveyor Viewpoint 2	2	518276.253	169200.296	9.200	A
Surveyor Viewpoint 3	3	518275.231	169198.712	9.188	A
Surveyor Viewpoint 4	4	518282.839	169207.902	11.948	A
Surveyor Viewpoint 5	5	518301.714	169208.573	12.973	A
Surveyor Viewpoint 6	6	518301.453	169210.951	11.432	A
Surveyor Viewpoint 7	7	518301.535	169210.820	16.281	A
Surveyor Viewpoint 8	8	518302.117	169206.368	16.274	A
Surveyor Viewpoint 9	9	518302.545	169204.062	13.226	A
Surveyor Viewpoint 10	10	518295.312	169194.553	11.887	A
Surveyor Viewpoint 11	11	518299.757	169191.606	14.729	A
Surveyor Viewpoint 12	12	518343.529	169198.856	17.106	A
Surveyor Viewpoint 13	13	518302.383	169205.329	13.222	A
Surveyor Viewpoint 14	14	518279.094	169199.263	9.350	A
Surveyor Viewpoint 15	15	518302.517	169209.525	21.863	A
Surveyor Viewpoint 16	16	518302.730	169207.749	21.660	A
Surveyor Viewpoint 17	17	518310.296	169200.007	12.299	A
Surveyor Viewpoint 18	18	518310.553	169198.038	12.290	A
Surveyor Viewpoint 19	19	518301.549	169209.974	12.320	A
Surveyor Viewpoint 20	20	518302.369	169204.892	14.354	A
Surveyor Viewpoint 21	21	518300.161	169191.296	13.508	A
Surveyor Viewpoint 22	22	518290.014	169206.632	9.518	A
Surveyor Viewpoint 23	23	518286.150	169194.209	9.478	A
Surveyor Viewpoint 24	24	518302.376	169205.333	13.222	A
Surveyor Viewpoint 25	25	518301.270	169183.666	12.788	A

Class A <0.05m Class C <0.30m

fig 3b Survey coordinates supplied as an Excel file

fig 3c The total station in position

Accurate Visual Representation - Surveyed Viewpoints

Project name: _____ **Date:** _____

Job number: _____ **View reference:** _____

Surveyor name: _____

		OS Grid Co-ordinates			
	Reference	Easting	Northing	Elevation	Accuracy (A-D)
Camera Position	V3	528673.768	181155.202	24.352	A

Notes:
Bearing of image centre (approx.) = **120° 00' 00"**

6. Digital Images and Colour Correction

6.1. The digital images supplied by the photographer were saved as Photoshop PSD/ TIFF/ JPG files for use in the verification process.

6.2. Using the surveyed horizon points as a guide, each image is checked and rotated, if necessary, to ensure that the horizon line on the photograph is level, based upon the information received from the surveying team.

6.3. Any incorrect colour 'casts' are adjusted to match the original processed image. Similarly the brightness/contrast ratios of the image are corrected to match the original image (fig. 4b).

6.4. In professional architectural photography, having the camera pointing 'horizontally' (parallel with the ground) is desirable to ensure that vertical elements of the photographed scene remain perpendicular to the horizon. In reality the eye and brain compensate for non-perpendicular verticals and it is desirable to replicate this with photography. The tripods used by professional architectural photographers have built-in spirit level 'bubbles' to assist the photographer in keeping the vertical building elements 'vertical'.

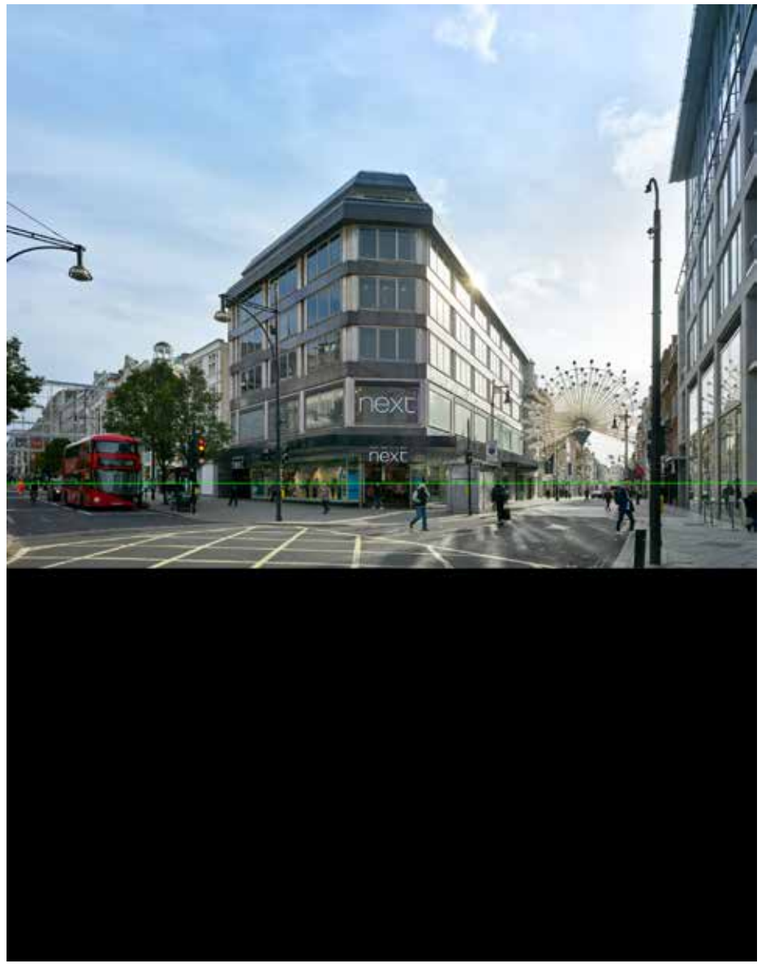
6.5. Following from 6.3 above, the cameras used by professional architectural photographers have the ability to 'shift' the camera back upwards which removes the 'static' nature of having the horizon midway along the vertical dimension of the photograph (as opposed to a standard 35mm camera) and allows for the inclusion of more sky over immediate foreground. This is standard practice within architectural photography and more realistically reflects the viewers experience on site.

6.6. As noted within Appendix 13 of the LI, the tilt shift lens is increasingly being used in architectural photography in urban locations. It can also be employed for taking photographs up or down slope. If the verticality of a proposed building is not picked up using the standard lens, then the tilt shift can be employed.

6.7. The 'virtual' cameras in proprietary 3D software typically do not have this 'shift-negative' feature and so their horizon line will always bisect the vertical dimension of the view when the virtual camera's view cone is positioned parallel to the ground plane. Consequently the digital image is further resized to ensure that the surveyed horizon line bisects the background image in the vertical dimension. (fig 4b).

fig 4a High resolution image as supplied before colour correction

fig 4b High resolution image after colour correction. The image has been rotated and resized to ensure that the surveyed horizon line is level and bisects the vertical dimension equally



7. The 3D Model and View Verification Process

7.1. All drawn and digital information regarding the proposed development was supplied to Hayes Davidson in digital format by PRP Architects.

7.2. At each view position a virtual camera was set up in the 3D software 3DS Max using the coordinates provided by the surveyor. The coordinates of the surveyed verification points were used to create accurate reference points in 3D space. The scene was verified by aligning the surveyed points between the data scene and the photograph (fig. 5a). This alignment is then quality checked by a select pool of experienced partners. Where improvements are deemed necessary, the alignment is amended and re-checked until the required accuracy is achieved.

7.3. Hayes Davidson used a 3D model of the proposed development supplied by PRP Architects. This computer model was provided at the correct position and height by PRP Architects, which was also checked by Hayes Davidson. This model was then precisely aligned to the surveyed coordinate system and the aligned scene (fig. 5b).

7.4. Where multiple images were required to create the wider scene, Hayes Davidson used an in-house technique called Multi-Panel. Each individual image was aligned using the process above, then the virtual cameras are merged into a single scene in the 3D software, thus creating a merged wide image. This technique reduces the distortion caused by using wider lenses. Photographs for Multi-Panel images are taken in a clockwise direction (left-to-right), avoiding movement in the scene between the adjacent images where possible.

7.5. Using the verified camera described previously, the computer produces an image, known as a render, of the proposed building using the geometry specified. This render is then utilised within compositing software to create the varying image styles (fig. 5c).

fig 5a Contextual survey points matched to the scene

fig 5b The 3D model placed into the scene

fig 5c The wireline image

8. Image Production

8.1. Buildings with a similar orientation to the proposed building within the scene can be used as a reference to obtain valuable visual clues as to how the light would react with the proposed building.

8.2. Hayes Davidson analysed the scene and assessed tonal values. We used the computer to take multiple digital samples of values for hue, saturation and brightness from a number of scenes in the photography. From this an analysis and assessment of the likely tonal and colour values in the scene was made.

8.3. The computer generated image of the proposals is combined with the background photography using proprietary digital compositing software.

Notes

8.4. Subject to accurate survey information, the position and scale of a building in a scene can be verified mathematically. Whilst position, height and scale will be objectively accurate, subjective judgement must be used when lighting is being assessed and therefore a definitive and objectively verified agreement on lighting is not possible.

8.5. The computer can accurately assess the relative contrast between the faces of a building at a particular time. The computer can also render approximate material definitions. However, not every aspect of what is seen visually on screen is able to be simulated using an automatic or wholly objective process. Reflected light, local lighting conditions, detailed material definitions, climatic conditions including moisture content of the air both across the scene as a whole and locally cannot be accurately assessed or simulated by current computer technology.

8.6. Hayes Davidson therefore turn to the scene for visual clues in order to set the render of the proposed development into the photograph.

Image Scaling

8.7. The objective of Type 4 visualisation is to present a printed image which gives a realistic impression of scale and detail. Where scale-verifiable output is not possible (LI Appendix 1.1.7), verified photomontages can still be regarded as Type 4, provided they are supported by quantifiable data and a technical methodology, and agreed by the competent authority.

fig 6a The scene with the features in the foreground marked so that the proposed development can be positioned

fig 6b The rendered model of the development accurately positioned

fig 6c The completed photomontage (AVR3)

Technical table

View No.	Location	Summer / Winter	Rendered / Wireline	Camera / Tripod height (m)	Number of panels	Horizontal field of view per panel (degrees)	Vertical field of view per panel (degrees)	Lens used (mm)	Date	Time	Easting (m)	Northing (m)	Elevation (mAOD)	Eye Level (mAOD)	Distance from Scheme (m)	Bearing (degrees)
02	Abbotswood Way and Abbey Close junction, looking south-west	Summer	Chalk Massing + Wireline	1.6	1	70.1	55.5	35	07/09/2025	09:54	510803.41	180409.77	30.155	31.755	111.665	211.194
05	Minet Country Park, looking south-west	Summer	Chalk Massing + Wireline	1.6	1	70.1	55.5	35	08/09/2025	10:11	511133.56	180500.42	34.59	36.19	395.456	241.24
06	Avondale Drive, looking west	Summer	Chalk Massing + Wireline	1.6	1	70.1	55.5	35	06/09/2025	14:11	510785.31	180214.75	30.224	31.824	20.361	321.641
07	Avondale Drive, looking west	Summer	Chalk Massing + Wireline	1.6	1	70.1	55.5	35	08/09/2025	14:20	510740.41	180238.56	30.137	31.737	12.358	316.226
08	Avondale Drive, looking north-west	Summer	Chalk Massing + Wireline	1.6	1	70.1	55.5	35	06/09/2025	13:35	510745	180120.34	30.353	31.953	121.756	345.866
11	Avondale Drive, looking east	Summer	Chalk Massing + Wireline	1.6	1	70.1	55.5	35	08/09/2025	13:36	510552.38	180308.16	31.235	32.835	82.946	98.414

HAYES DAVIDSON

Thank you

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Appendix B

The following list includes 6 viewpoints from the original set of 12 view locations assessed in the 2021 TVIA for the consented scheme (Planning Reference: 76550/APP/2021/4499). These 6 viewpoints were assessed during the preliminary views study for the Amended Scheme and were subsequently excluded due to minimal or no perceptible change in the proposed illustrative massing relative to the existing consent, or due to limited intervisibility of the site within these views. The site visit and modelling process used to inform the scoped views are evidenced in the subsequent pages and the views scoping was agreed in consultation with planning and design officers at LBH.

The 6 viewpoints scoped out of the visual impact assessment for the Amended Scheme are listed below corresponding the numbering as per the 2021 TVIA submitted in support of the extant consent:

View 1: Abbey Close, looking south

View 3: Minet Country park, looking west

View 4: Minet Country park, looking west

View 9: Gade close, looking north-east

View 10: Clivesdale Drive, looking north-east

View 12: Avondale Drive, looking east

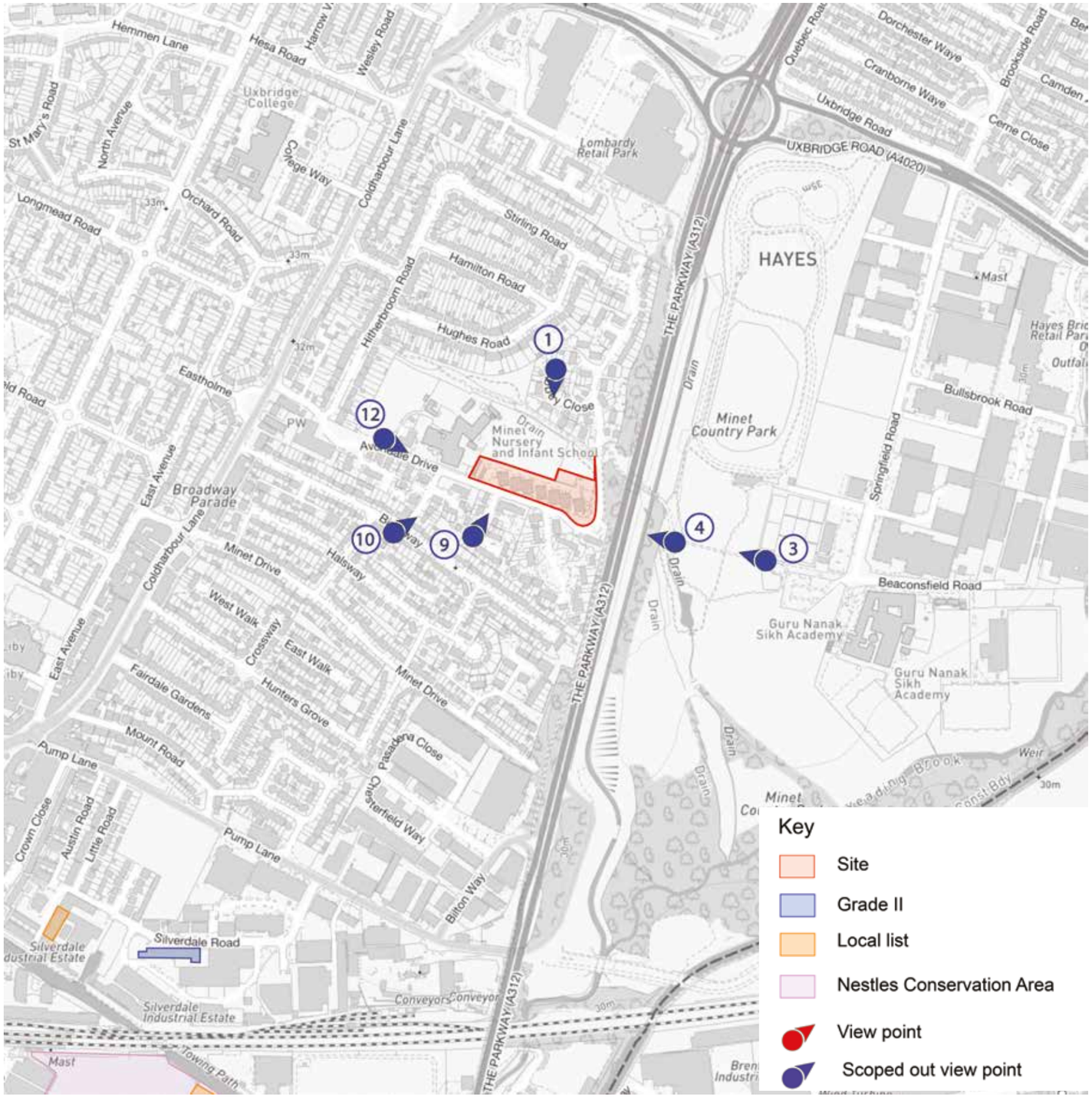


Figure A: Map with 6 scoped out viewpoints previously assessed in the approved outline application. Approximate site boundary highlighted in red.

VIEW 1 - EXISTING 2021 : ABBEY CLOSE, LOOKING SOUTH

Viewpoint map

VIEW 1 - 2021 TVIA - CONSENTED : ABBEY CLOSE, LOOKING SOUTH

V.1

VIEW 1 - EXISTING 2025 : ABBEY CLOSE, LOOKING SOUTH

Viewpoint map

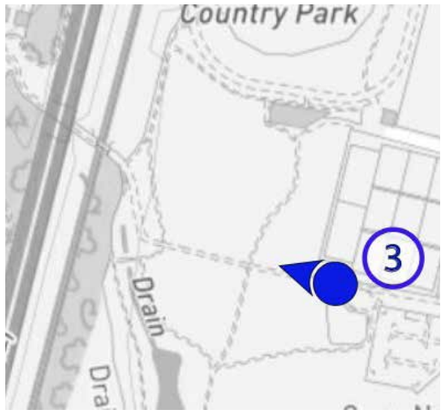
VIEW 1 - PROPOSED : ABBEY CLOSE, LOOKING SOUTH

Summer condition

V.1

VIEW 3 - EXISTING 2021 : MINET COUNTRY PARK, LOOKING WEST

Viewpoint map

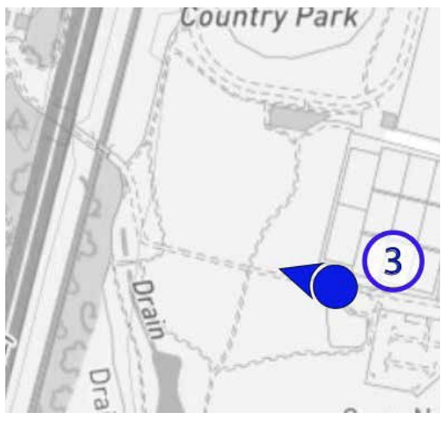


VIEW 3 - 2021 TVIA - CONSENTED: MINET COUNTRY PARK, LOOKING WEST

V.3

VIEW 3 - EXISTING 2025 : MINET COUNTRY PARK, LOOKING WEST

Viewpoint map



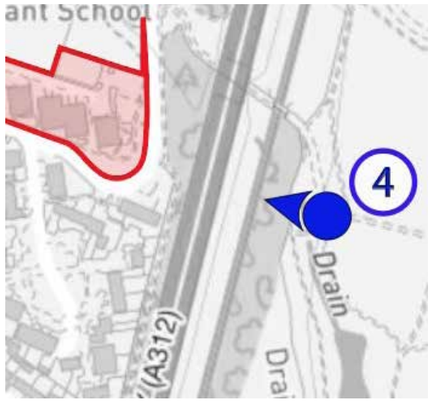
VIEW 3 - PROPOSED : MINET COUNTRY PARK, LOOKING WEST

Summer condition

V.3

VIEW 4 - EXISTING 2021 : MINET COUNTRY PARK, LOOKING WEST

Viewpoint map

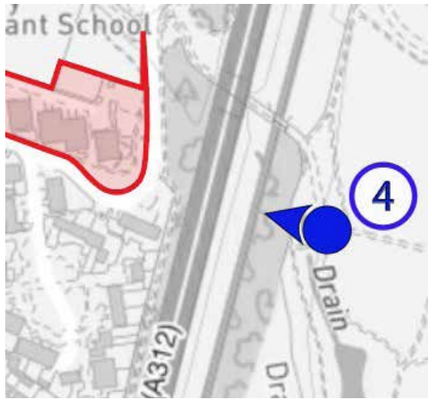


VIEW 4 - 2021 TVIA - CONSENTED : MINET COUNTRY PARK, LOOKING WEST

V.4

VIEW 4 - EXISTING 2025 : MINET COUNTRY PARK, LOOKING WEST

Viewpoint map



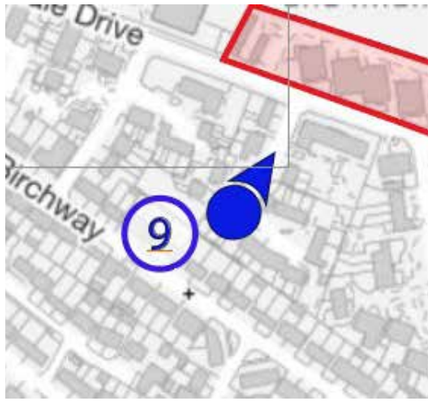
VIEW 4 - PROPOSED : MINET COUNTRY PARK, LOOKING WEST

Summer condition

V.4

VIEW 9 - EXISTING 2021 : GADE CLOSE, LOOKING NORTH-EAST

Viewpoint map

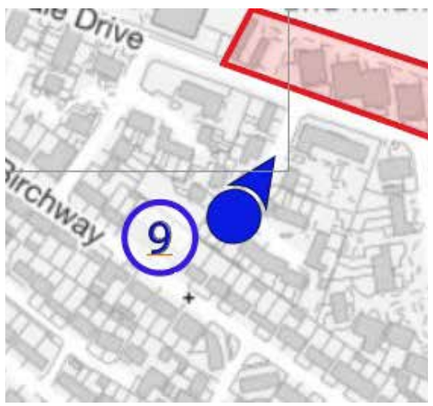


VIEW 9 - 2021 TVIA - CONSENTED : GADE CLOSE, LOOKING NORTH-EAST

V.9

VIEW 9 - EXISTING 2025 : GADE CLOSE, LOOKING NORTH-EAST

Viewpoint map



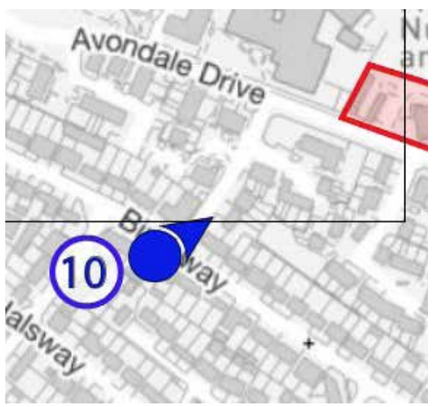
VIEW 9 - PROPOSED : GADE CLOSE, LOOKING NORTH-EAST

Summer condition

V.9

VIEW 10 - EXISTING 2021 : CLIVESDALE DRIVE, LOOKING NORTH-EAST

Viewpoint map

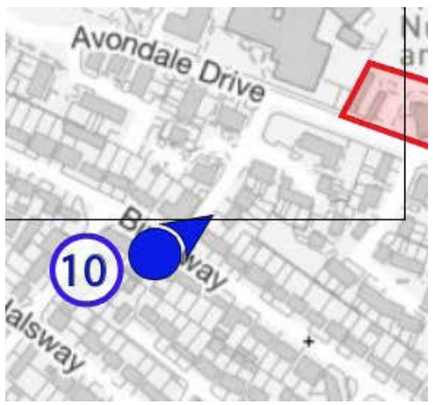


VIEW 10 - 2021 TVIA - CONSENTED : CLIVESDALE DRIVE, LOOKING NORTH-EAST

V.10

VIEW 10 - EXISTING 2025 : CLIVESDALE DRIVE, LOOKING NORTH-EAST

Viewpoint map



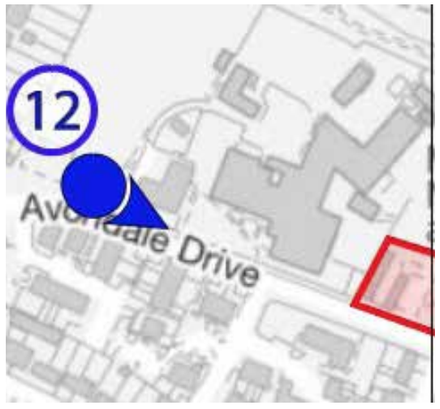
VIEW 10 - PROPOSED : CLIVESDALE DRIVE, LOOKING NORTH-EAST

Summer condition

V.10

VIEW 12 - EXISTING 2021 : AVONDALE DRIVE, LOOKING EAST

Viewpoint map

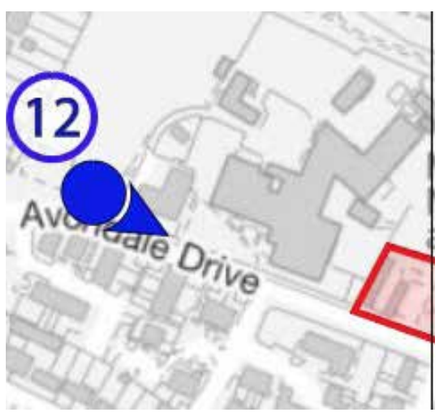


VIEW 12 - 2021 TVIA - CONSENTED : AVONDALE DRIVE, LOOKING EAST

V.12

VIEW 12 - EXISTING 2025 : AVONDALE DRIVE, LOOKING EAST

Viewpoint map



VIEW 12 - PROPOSED : AVONDALE DRIVE, LOOKING EAST

Summer condition

V.12

savills