LICHFIELDS

Throwley Way

Visual Appraisal

Appendix 3

PA Housing

LICHFIELDS

CL61675–01

LICHFIELDS

Part 1

A3 Plans

Key

Site Boundary

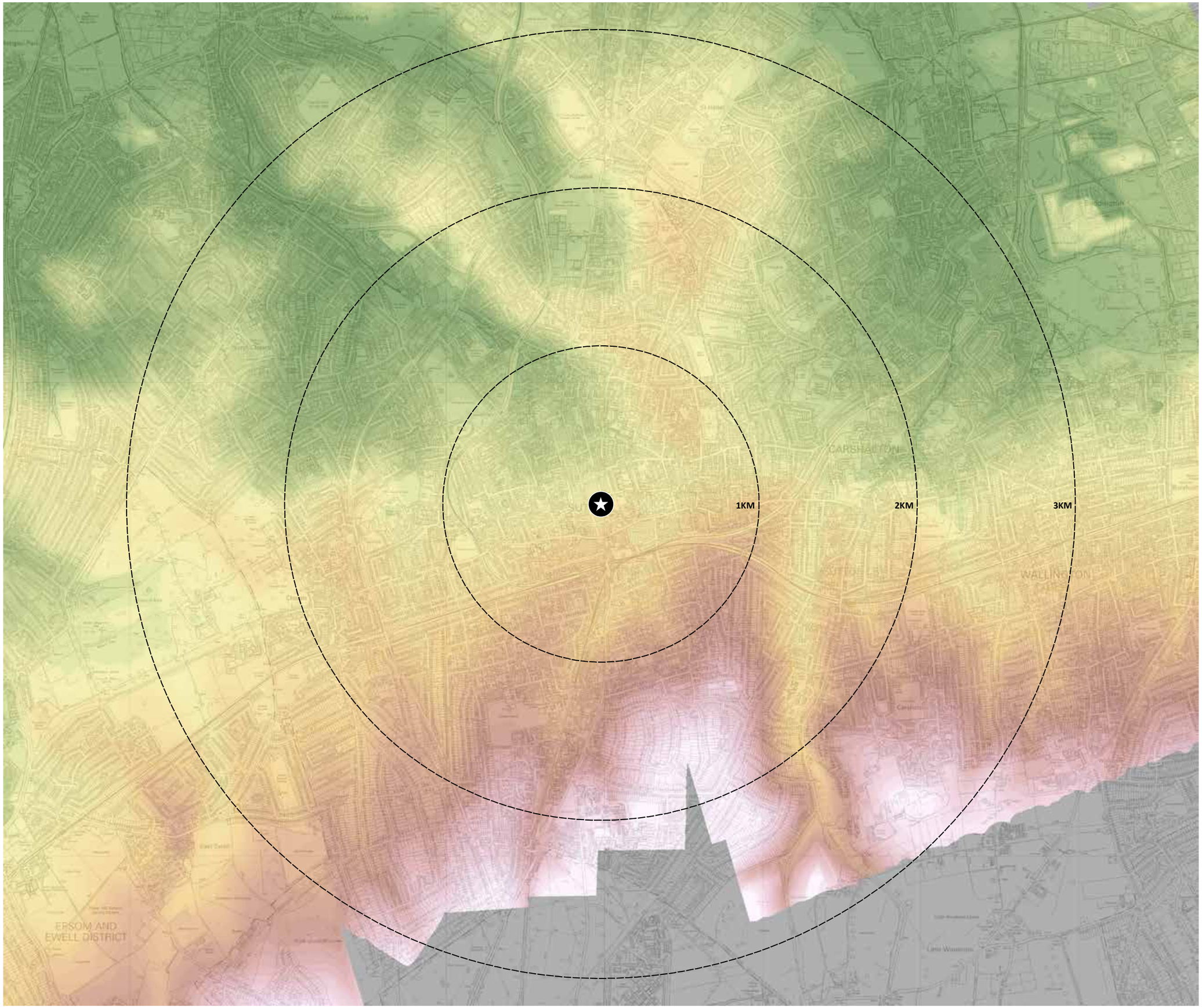
Conservation Area

LICHFIELDS

Project	Throwley Way
Title	**Site Location Llan**
Client	PA Housing
Date	07.04.20
Scale	NTS
Drawn by	AC
Drg. No.	IL61765/01-002 revB

N

LUD/LF61675/01



Key

Site

Topography (Digital Terrain Model):

100m Greater Elevation

75m

50m

Lower Elevation

No LiDAR Data

0 200 400 600 800 1,000 m

LICHFIELDS

Project	Throwley Way, Sutton
Title	Topography (Digital Terrain Model)
Client	PA Housing
Date	22.01.2020
Scale	1 : 22,500 @ A3
Drawn by	MAR
Drg. No	GIS\LF\61675\01-01

N

GIS Reference: S:\LF Jobs\LF61675 - Throwley Way, Sutton\LF61675 - Throwley Way, Sutton - Topography (DTM) - 21.01.2020.mxd

Key

Site

Building (heights sourced from LiDAR Digital Surface Model)

Zone of Theoretical Visibility (ZTV):

ZTV represents the area over which a development could theoretically be seen and is based on a Digital Surface Model (DSM) with full surface screening. The DSM is produced from the last return LIDAR signal and includes heights of all surface objects, such as vehicles, buildings and vegetation, as well as the terrain surface. LiDAR is usually flown during winter months meaning that vegetation is at its barest.

Proposed Development Height: 122.6m (A.O.D)
Viewer Height: 1.6m

Proposed development visible

No LiDAR terrain data

0 200 400 600 800 1,000 m

LICHFIELDS

Project	Throwley Way, Sutton
Title	Zone of Theoretical Visibility (ZTV) 04
Client	PA Housing
Date	28.07.2020
Scale	1 : 22,500 @ A3
Drawn by	MAR
Drg. No	GIS\LF\61675\01-05

N

GIS Reference: S:\LF Jobs\LF61675 - Throwley Way, Sutton\LF61675 - Throwley Way, Sutton - ZTV (04) - 28.07.2020.mxd

Key

Site Boundary

Town Centre Character Area

Urban Residential Character Area

LICHFIELDS

Project	Throwley Way
Title	**Character Area Plan**
Client	PA Housing
Date	08.04.20
Scale	NTS
r awn by	AC
Drg. No.	IL61765/01-003 revA

N

LUD/LF61675/01

LICHFIELDS

Part 2

Visual Appraisal

Key

Approima te Site Boundary

AVR viewpoint loca ons

Vu City view loca ons

LICHFIELDS

Project	Throwley Way
Title	**View Loca ons**
Client	PA Housing
a te	23.01.20
Scale	NTS
r awn by	JL
r g. No.	IL61765/01-001 rev0

N

LUD/LF61675/01

View 1: High Street/Trinity Square

Role of Site in view / baseline description

Visibility of site

Looking north east from Trinity Square, the view towards the site is screened by the buildings along the High Street frontage.

Sensitivity

Receptors

Pedestrians/ shoppers

Value of View

Low to medium - predestrianised street enclosed by a variety of predominantly modern buildings of varying quaulity and different ages and styles including a couple of older frontages. Taller buildings are evident above the foreground buildings most noticeably Aspects. General consistency in materials and colours of building notwithstanding variation in style. Within Sutton Town Centre Conservation Area.

Susceptibility

Low to medium - shoppers not typically focussed on amenity, people walking through the town centre, in the public space may have some secondary awareness of visual amenity.

Sensitivity

Low - shoppers

Medium - pedestrians/ people sitting in Trinty Square

Nature of change

While the main foreground streetscape would remain unchanged, there would be a recognisable new element on the skyline of this view with the upper floors of the proposal rising above the frontage buildings.

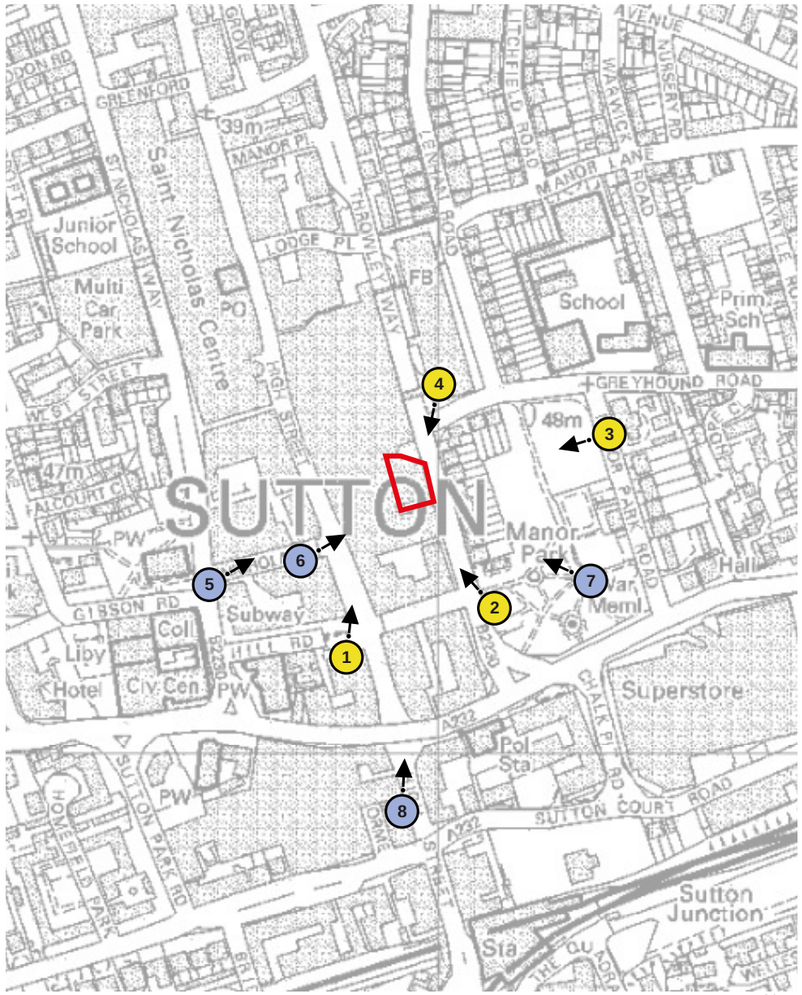
There would be a **medium** degree of change.

Visual Effect

The main frontage of buildings and pedestrianised area along the High Street would remain the principal focus of the view. A layer of taller buildings beyond the frontage is a characteristic and the proposal would be seen in the context of these secondary elements. It may draw the eye to some extent but would relate well to Aspects in its scale but would be less prominent. The building's slender stepped profile and well composed elevations would be articulated by curved balcony forms, the use of materials and a simple but distinctive 'crown' that would be distinctive and provide visual interest.

The scale and massing would be appropriate in the existing background context. The design of the facades fits in well with the character of the street with the vertical proportion and width of the bays tying into the repeated pattern of bays within the townscape. The vertical proportions of the facades are balanced by horizontal elements that reduce the apparent scale. The depth and modelling of the facades, use of texture would provide addional visual interest to the townscape and skyline. The materials palette of red brick and self coloured concrete would fit in well with the character of the street scene.

Minor beneficial to moderate beneficial.



View Location plan extract

Image details	
Grid ref.	E 525925.02 N 164096.05
Focal length lens	24mm
Date / time	21.02.2020 10:03
Visualisation type	AVR1/2 (shaded wirelines)
Viewpoint height	1.65m
Field of view	73.7 degree

Existing

Proposed

View 2: Throwley Way

Role of Site in view / baseline description

Visibility of site

Looking south down Throwley Way from the entrance to Manor Park there is a view of the site frontage. The hoardings on the frontage to Throwley Way can be seen.

Sensitivity

Receptors

Pedestrians

Value of View

Low - General townscape view comprising a disparate collection of mainly 20th century buildings of varying quality and condition looking south along gyratory (against the flow of traffic) with little existing amenity value. The buildings along the frontage are of varied scale, age and character with an overall lack of visual cohesion and a number of detracting elements including the site.

Susceptibility

Low - people in this location will be more focussed on their journey rather than visual amenity.

Sensitivity

Low

Nature of change

The majority of the building would be seen on the frontage to Throwley Way, partly screening the flank elevation of Times House beyond.

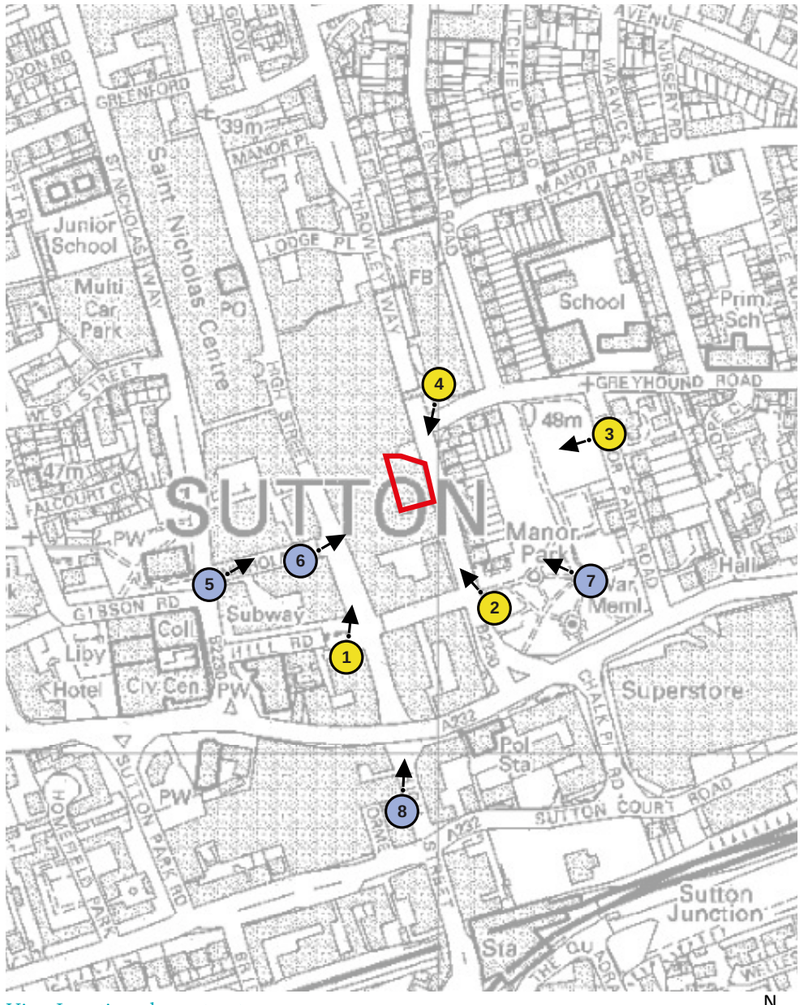
There would be a **high** magnitude of change.

Visual Effect

The proposal would provide additional enclosure to the street scene, closing the gap and providing a greater degree of coherence and focus to the view. There would be a contrast in scale across the street, compatible with the existing character. The glazed frontage would introduce views to active ground level uses with a clear base provided by the columns and glazed frontages. The vertical proportions and stepping of the elevations mediates between the scale of Aspects and the scale of Times House. The vertical articulation of the balconies and the scale of these bays ties in visually with the rythmn of houses stepping down along the street.

The architectural treatment of the facades is well balanced with horizontal and vertical elements that articulate and break down the apparant scale and provides visual interest. The materials palette including textured brick and self coloured concrete are of high quality, durable and will ensure visual consistency. The colours would be compatible with the wider character of the townscape.

The building would contribute positives to the to the townscape and would reinforce identity and local character. There would be a **moderate beneficial** change to the view.



View Location plan extract

Image details	
Grid ref.	E 526027.36 N 164148.49
Focal length lens	24mm
Date / time	21.02.2020 10.37
Visualisation type	AVR1/2 (shaded wirelines)
Viewpoint height	1.65m
Field of view	73.7 degree

Existing

Proposed

View 3: Manor Park

Role of Site in view / baseline description

Visibility of site

Looking west from the eastern edge of Manor Park towards the backs of houses fronting onto Throwley Way. The proposal is screened from view.

Sensitivity

Receptors

People using the park for recreation

Pedestrians/ motorists along Manor Park Road

Value of View

Medium – open area of amenity grassland enclosed by trees with a variety of buildings above the trees on the skyline. There is amenity value in the trees and green space provided by the park. The surrounding urban area including existing tall buildings in Sutton town centre form part of the wider context and provide interest on the skyline.

Susceptibility

Medium – people moving through the area and using the park for informal recreation may have some secondary awareness in visual amenity.

Low - motorists on Manor Park Road and people using the park for active recreation are less likely to be focussed on visual amenity.

Sensitivity

Medium

Nature of change

The upper floors of the proposal would be seen on the skyline above the backs of the houses on Throwley Way and trees within the park. There would be some additional screening of the lower floors in summer. It would be a recognisable new element in the view.

There would be a **medium** degree of change.

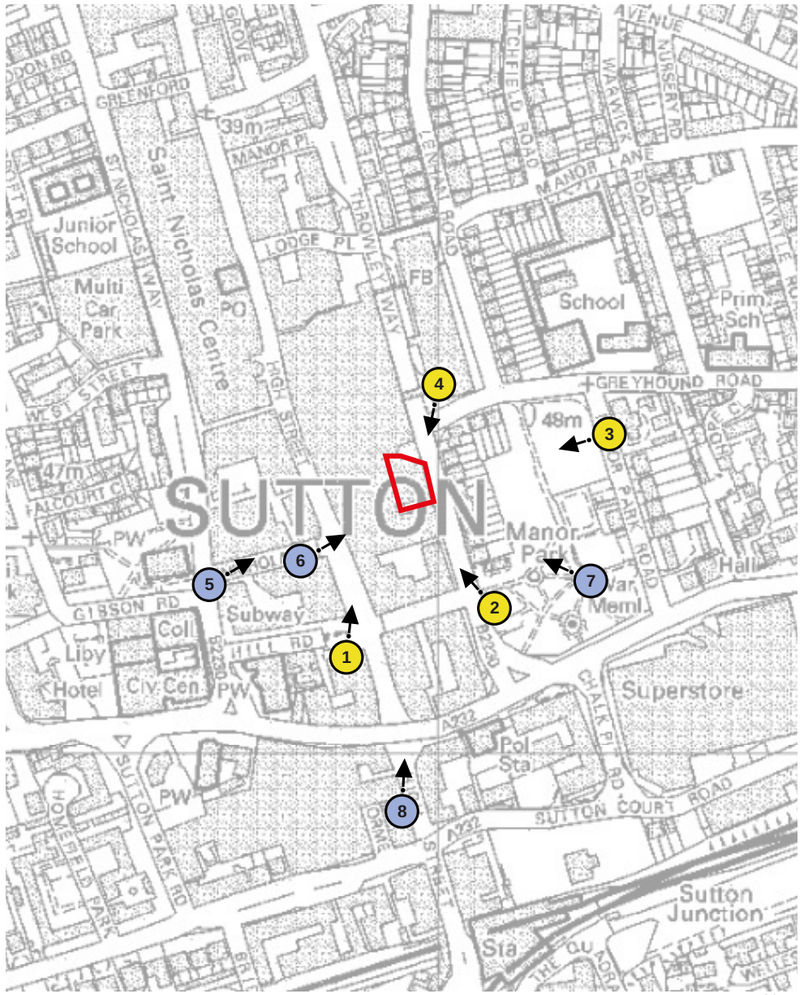
Visual Effect

The proposal would introduce a new element on the skyline that would be well spaced in relation to existing tall buildings to either side. It would replace an existing tall building on St Nicholas Way in the view (albeit this building has planning permission to be redeveloped with a taller replacement building).

Its slender stepped form, the distinctive 'crown' treatment and architectural expression including the layering of curved balconies would create visual interest on the skyline. The elevations have a well composed balance of horizontal and vertical elements. The stepped massing, vertical proportions and articulation of the facades and the palette of materials would fit in both with the buildings to either side and the character of the wider townscape.

The proposed development would be a distinctive and well designed addition to the skyline of the town centre that would signify regeneration of the site.

There would be a **modeate beneficial** change to the view.



View Location plan extract

N

Image details	
Grid ref.	E 526129.13 N164269.14
Focal length lens	24mm
Date / time	21.02.2020 11.27
Visualisation type	AVR1/2 (shaded wirelines)
Viewpoint height	1.65m
Field of view	73.7 degree

Existing

Proposed

View 4: Throwley Way

Role of Site in view / baseline description

Visibility of site

The existing site is clearly visible heading south on Throwley Way with the north eastern corner prominent close to the junction with Greyhound Road.

Sensitivity

Receptors

Pedestrians/motorists

Value of View

Low - General townscape view along Throwley Way that is dominated by the busy road and extensive blank facades of Times House prominent in the foreground. The site, surrounded by hoardings detracts from the view. The view includes a number of tall buildings including buildings around the station and Aspects. These contrast in scale and character with the smaller scale buildings on the frontage.

Susceptibility

Low - Users are likely to be focused on their journey with limited awareness or foucs on amenity value.

Sensitivity

Low

Nature of change

The proposals would replace the existing vacant site with a new tall building on the Throwley Way frontage. The building would be partly screened by Times House and would sit in front of the blank side elevation of Aspects.

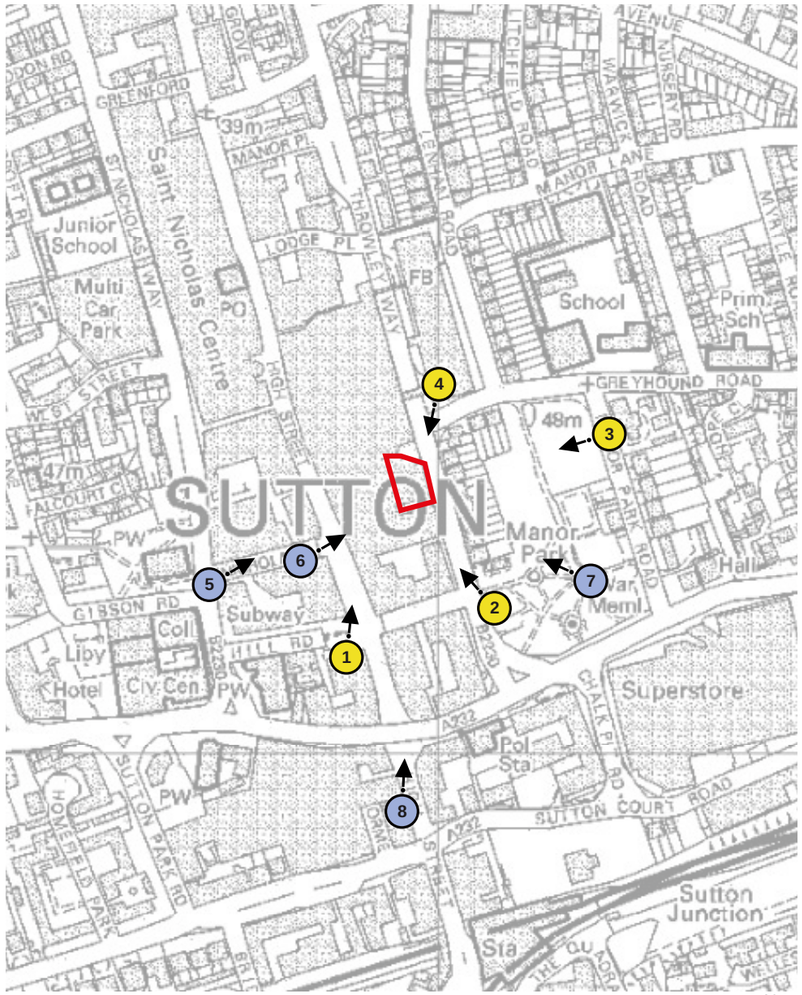
From this close, the building would be a prominent new element in the view and would result in a **high** magnitude of change.

Visual effects

The proposed development would introduce ground level activity and interest in the double height glazed base with views to the residential entrance and community facility. The built form would step down to Times Square in the foreground and be seen in the context of a range of other tall buildings within the town centre.

The stepped massing of the built form and articulation of the facades, with windows, balconies and varied materials and details would define a clear base, middle and top to the building, break down the apparant scale and provide visual interest. In particular, the intricate brickwork detailing and the texture and detail of the materials would be clearly seen from this location and would add to the architectural interest in an otherise relatively bland townscape. The materials palette and the balance of horizontal and vertical elements fare appropriate for the character of the townscape and would work well with other elements in the street.

There would be a **Moderate beneficial** change to the view.



View Location plan extract

N

Image details	
Grid ref.	E 525985.8 N164302.3
Focal length lens	24mm (portait)
Date / time	21/02/2020, 11:16
Visualisation type	AVR1/2 (shaded wirelines)
Viewpoint height	1.65
Field of view	73.5 degrees

Existing

Proposed

View 5: St Nicholas Road

Role of Site in view / baseline description

Visibility of site

The site is north east of the view location and is not visible.

Sensitivity

Receptors

Pedestrians/cyclists/motorists.

Value of View

Low - View along narrow service road towards High Street t form, however this would be consistent in height to the apartment block currently in the background.

dominated by St Nicholas House in the foreground. There are a variety of architectural styles and materials including a number of tall building elements. The view has little amenity value.

Susceptibility

Low to medium - people moving through the area towards High Street are unlikely to be focused on visual amenity.

Sensitivity

Low

Nature of change

The top floors of the proposed development would be visible above the flank of an existing buildings on the High Street frontage.

There would be low magnitude of change to the view.

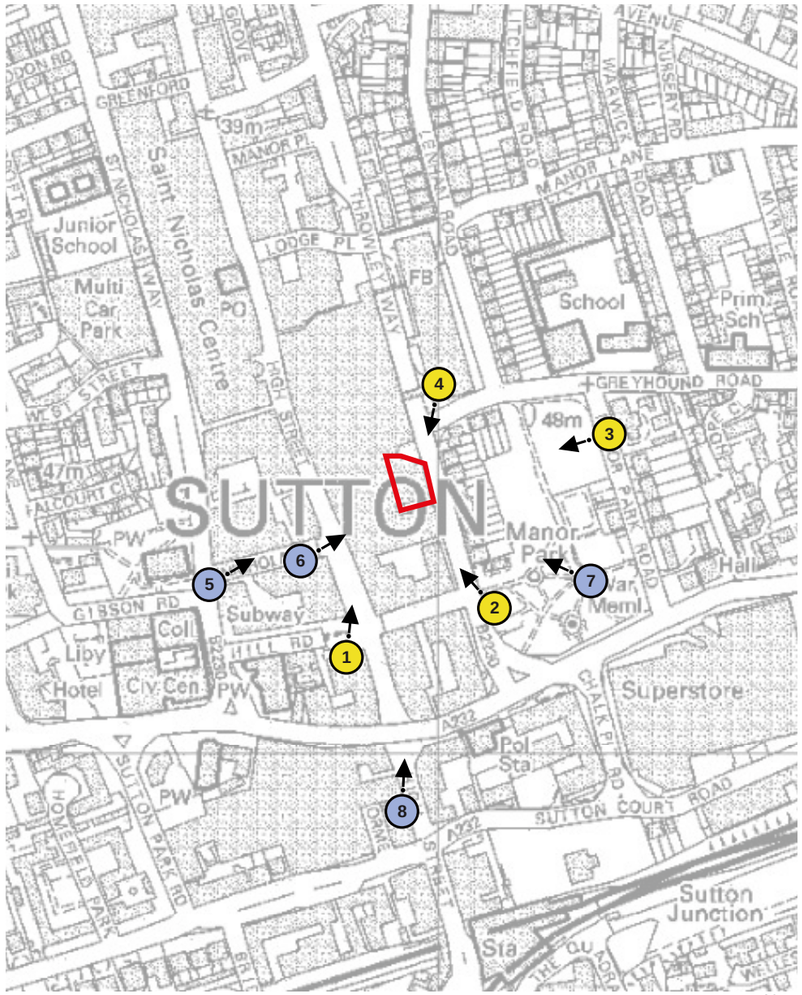
Visual Effect

The building would be seen in conjunction with the tower of St Nicholas House in the foreground and the flank of Peacocks defining the view through to High Street. The proposed development would introduce a further element on the skyline and would not obscure or detract from any existing positive townscape features.

There proposal would be of appropriate scale and massing for the view in the context of existing tall elements and would introduce a well designed and distinctive element on the skyline.

There would be a **Minor beneficial** change to the view.

Buildings that have been granted planning permission on the site of St Nicholas House are also shown in the cumulative visualisation. These would become a focal point in the foreground and almost entirely obscure the proposed development from view.



View Location plan extract

Image details	
Focal length lens	24mm
Date / time	23/04/20; 12:56
Visualisation type	Non verified VuCity image

Existing

Proposed

Cumulative


Camera Location: [525811, 52, 184149]
Bearing: 65°
Pitch: 13°
Focal Length: 24mm
© VU.CITY 2019

View 6: High Street/ St Nicholas Road

Role of Site in view / baseline description

Visibility of site

Looking west from the High Street towards Throwley Way, there is currently no view of the site.

Sensitivity

Receptors

Pedestrians/ shoppers within the town centre.

Value of View

Medium - General townscape view across the High Street from the eastern end of St Nicholas Road. The existing frontages of buildings on the High Street terminate the view with Aspects, seen on the skyline above. View within the conservation area and includes a building identified as a positive townscape element.

Susceptibility

Low to medium - shoppers not typically focussed on amenity, people walking through the town centre, in the public space may have some secondary awareness of visual amenity.

Sensitivity

Low to medium

Nature of change

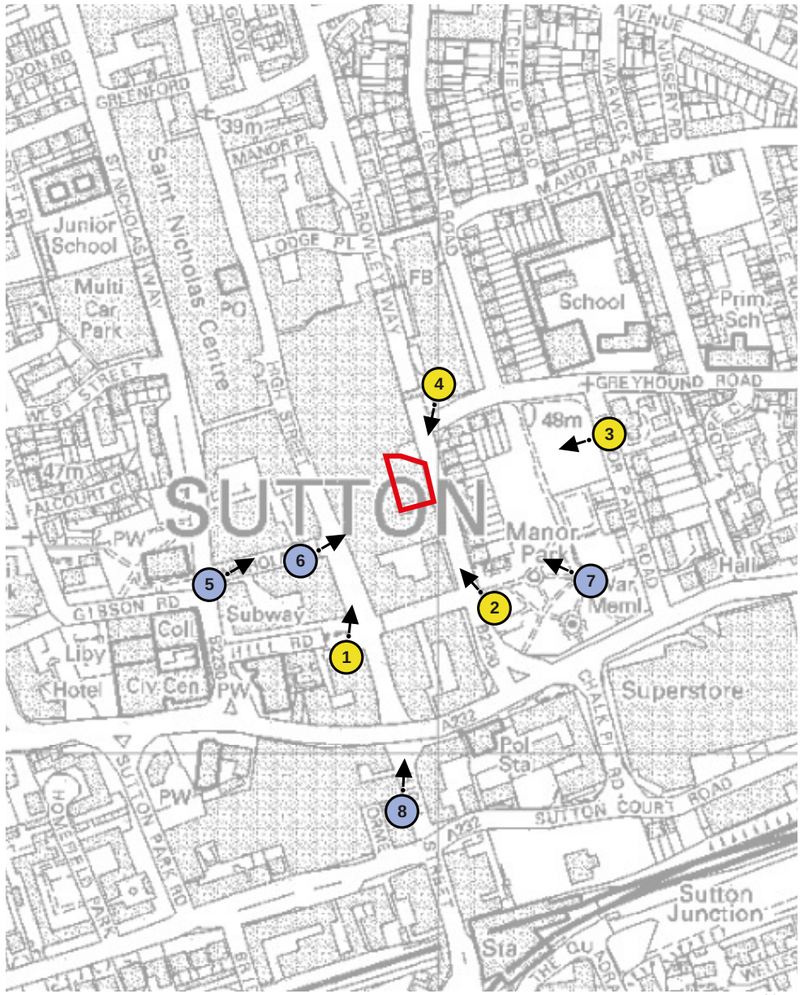
From this location the upper floors of the proposal would be seen above the frontage buildings. There would be a noticeable change to the view, There will be a **medium** degree of change.

Visual Effect

The proposed development would add a new element to the skyline in a location where an existing tall building is already seen. It would introduce a slender stepped form with vertical proportions and well designed facades that would not obscure or distract from the appearance of the frontage buildings on the High Street or appear out of scale or context given the existing character of the view.

The articulation of the facades with balconies, windows and banding would sucessfully break down the scale and the building elevations, materials palette and colours would fit in with the character of the townscape. The proposal would add to interest to the varied townscape and complement the vertically proportioned facade of the early 20th century retail unit.

There would be a **Minor to moderate beneficial** effect.



View Location plan extract

Image details	
Focal length lens	24mm
Date / time	23/04/20; 13:03
Visualisation type	Non verified VuCity image

-

Existing


HOME STORE
HOUSEHOLD • KITCHENWARE • BEDDING • ELECTRICALS LUGGAGE • RUGS
HOME STORE
TSB
Poundland

Proposed

View 7: Manor Park

Role of Site in view / baseline description

Visibility of site

The site is north west of the view location and is not visible.

Sensitivity

Receptors

Pedestrians/ people using the park

Value of View

Medium – View from footpath on main route through the park. The formal landscape and mature trees provide some local visual amenity. The urban setting of the park is evident in the buildings seen through the trees including a view towards aspects.

Susceptibility

Medium – people moving through the area and using the park for informal recreation may have some secondary awareness in visual amenity.

Sensitivity

Medium

Nature of change

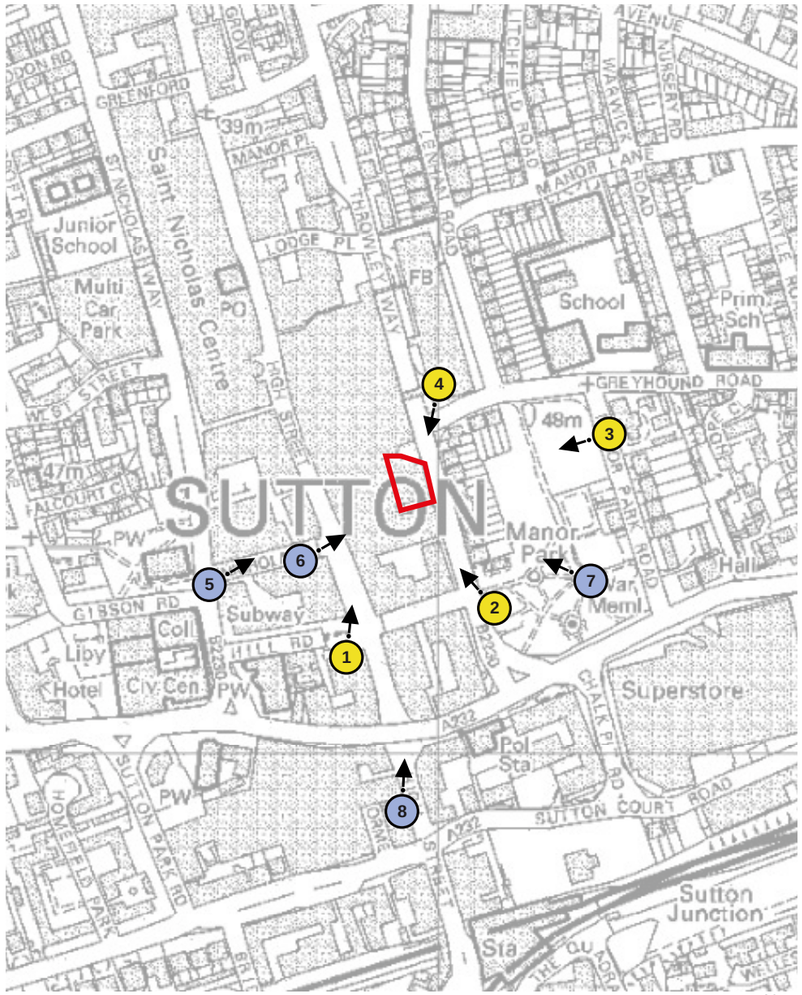
Filtered views of the upper floors of the development would be visible above existing buildings introducing an additional element on the skyline. There would be reduced less screening from trees during the winter months.

There would be **low to medium** magnitude of change to the view depending on the time of year.

Visual Effect

The building would be seen in the context of existing tall buildings on the edge of the Park. It would be fit comfortably into the context appearing of similar scale to Aspects and having a more slender, stepped massing and vertical proportions. The architectural treatment, including the articulation, materials and details such as the visually permeable top would ensure that the building would be high quality and provide a positive addition to the skyline of the town centre.

There would be a **Minor to moderate beneficial** change to the view.



View Location plan extract

N

Image details	
Focal length lens	24mm
Date / time	23/04/20; 13:05
Visualisation type	Non verified VuCity image

-

Existing

Proposed

View 8: High Street (Morrisons)

Role of Site in view / baseline description

Visibility of site

Looking north up the High Street towards Calshalton Road, the site is screened.

Sensitivity

Receptors

Pedestrians/ shoppers.

Value of View

Medium - General townscape view of pedestrianised part of the High Street mainly enclosed by a varied townscape of 20th century buildings mainly of limited architectural interest. Street trees filter and soften the views. Some value as view out of the Sutton Town Centre Conservation Area.

Susceptibility

Low to medium - shoppers not typically focussed on amenity, people walking through the town centre, in the public space may have some secondary awareness of visual amenity.

Sensitivity

Medium

Nature of change

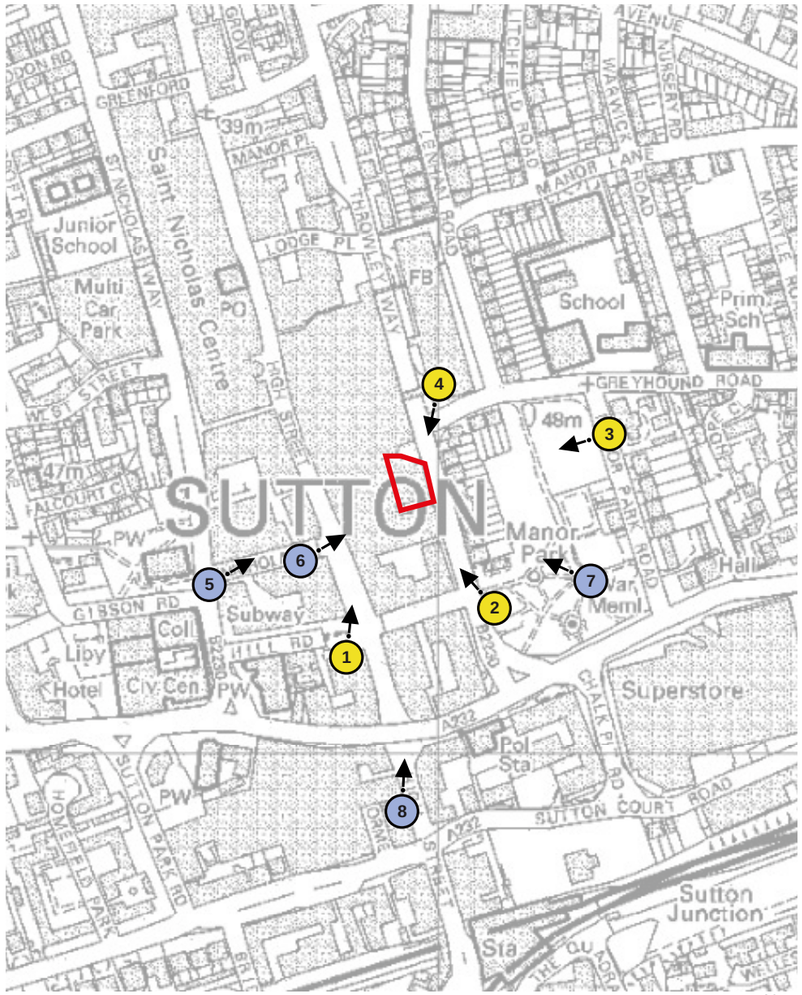
Only the top two floors and the open frame at roof level would be seen above existing building on the High Street, just to the left of Aspects.

There would be a **low** magnitude of change.

Visual Effect

The building would introduce a very small additional element to the view that would be seen in conjunction with Aspects and the modern office development on the junction. The character of the view would remain one in which the High Stret and crossroads are seen in the foreground with taller elements beyond forming part of a layered roofscape. The articulation of the building and palette of materials would ensure that the building would complement the existing townscape.

There would be a **Minor beneficial** visual effect



View Location plan extract

Image details	
Focal length lens	24mm
Date / time	23/04/20; 13:04
Visualisation type	Non verified VuCity image

-

Existing

Proposed

View 9: Belmont Rise

Role of Site in view / baseline description

Visibility of site

The view looks north west along Mulgrave Road from Belmount Rise. The site is not visible from the view.

Sensitivity

Receptors

Pedestrians/cyclists/motorists.

Value of View

Medium - Glimpsed townscape view across the roofscape of the leafy wider suburban residential area to the west in which the skyline of tall buildings within the town centre is seen.

Susceptibility

Low to medium - The view is from a busy main road/ motorists focussed on their journey.

People commuting are likely to be more focussed on their journey but may have some secondary interest in visual amenity.

Sensitivity

Low to medium

Nature of change

The top of the development would be visible on the skyline but would be a relatively small component in the context of the overall view.

There would be a **low** degree of change.

Visual Effect

The development would be consistent with the character of the view which includes a series of town centre buildings that sit along the skyline. It would be seen to the left of Aspects and would be a more slender stepped element, projecting above the tree line. The emphasis on the cluster of buildings around the station would remain.

The proposed development would be an appropriate and positive addition to the scene.

Minor beneficial

Buildings that have been granted planning permission on the site of St Nicholas House are also shown in the cumulative visualisation. It can be seen that these are of similar height and position within the skyline to the application proposal.

Image details	
Focal length lens	50mm
Date / time	23/04/20; 12:52
Visualisation type	Non verified VuCity image

-

N

View Location plan extract

Existing

Proposed

Cumulative

Scheme for St Nicholas House

The application scheme

View 10: Benhill Wood Road

Role of Site in view / baseline description

Visibility of site

Looking south west down Benhill Wood Road the site is not visible.

Sensitivity

Receptors

Pedestrians/cyclists/motorists.

Value of View

Medium - General townscape view along a relatively elevated residential street with two to three storey building and mature trees. The tall buildings in the town centre provide a focal point on the skyline

Susceptibility

Low to medium - motorists unlikely to have any focus on visual amenity, pedestrians and cyclist may have some secondary awareness of visual amenity.

Sensitivity

Low to medium

Nature of change

The top of the building would be seen above the roofline of houses.

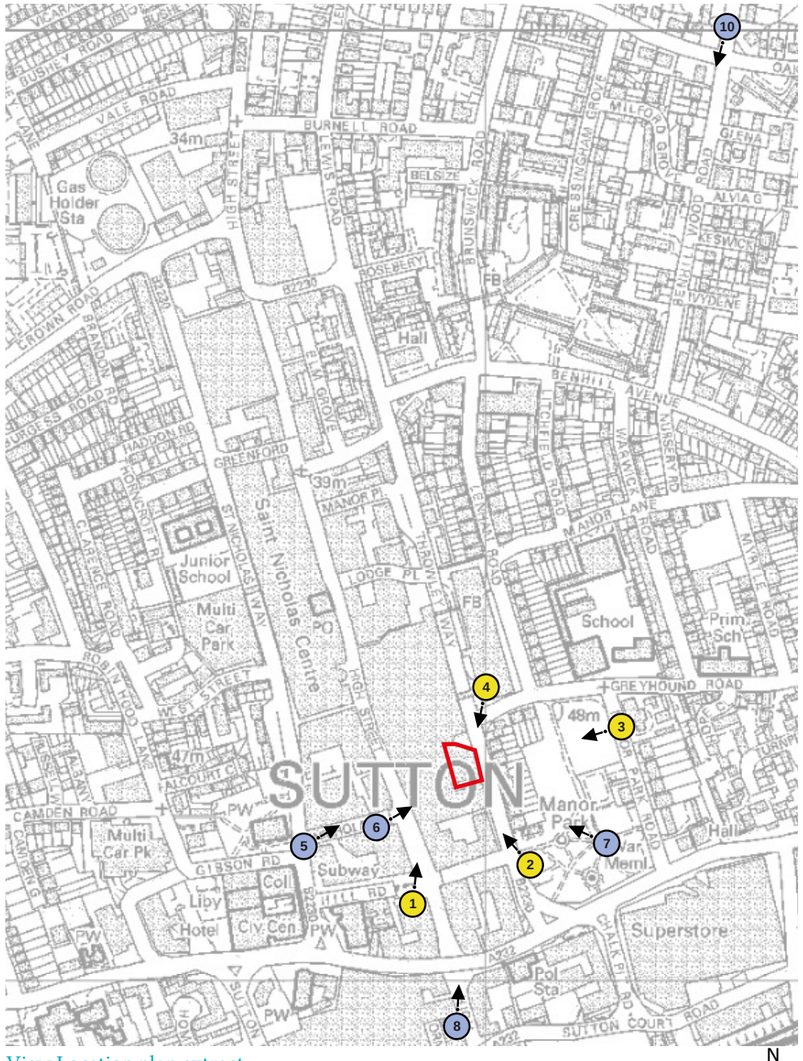
There would be a **low** degree of change.

Visual effects

The proposed development would be visble on the skyline in conjunction with a range of town centre buildings. The scale and massing of the scheme would be compatible with existing skyline elements and sit comfortably in relation to Aspects. It would be a slender and distinctive brick building with a stepped form and framing to the top that would reinforce the character of Sutton town centre with its cluster of tall buildings.

There would be a **minor beneficial** visual effect.

Buildings that have been granted planning permission on the site of St Nicholas House are also shown in the cumulative visualisation but are largely screened and would not perceptibly alter the visual effect from this location.



View Location plan extract

N

Image details	
Focal length lens	50mm
Date / time	23/04/20; 13:08
Visualisation type	Non verified VuCity image

-

Existing

Proposed

Cumulative

View 11: Carshalton Road

Role of Site in view / baseline description

Visibility of site

Looking east towards the site from Carshalton Road where the road intersects with Victoria Road, the site is not visible.

Sensitivity

Receptors

Pedestrians/motorists

Value of View

Medium - General townscape view along a busy main road through a primarily residential area. The curve in the road and elevated position enable a view of the late 19th and early 20th century buildings on the frontage with taller buildings within Sutton town centre (Aspects) seen on the skyline.

Susceptibility

Low to medium - Motorists are likely to be focused on their journey with limited awareness of amenity value, whereas pedestrians may have some secondary focus on visual amenity notwithstanding the context of the main road.

Sensitivity

Low to medium

Nature of change

A limited part of the top of the building would be visible on the skyline above the frontage buildings.

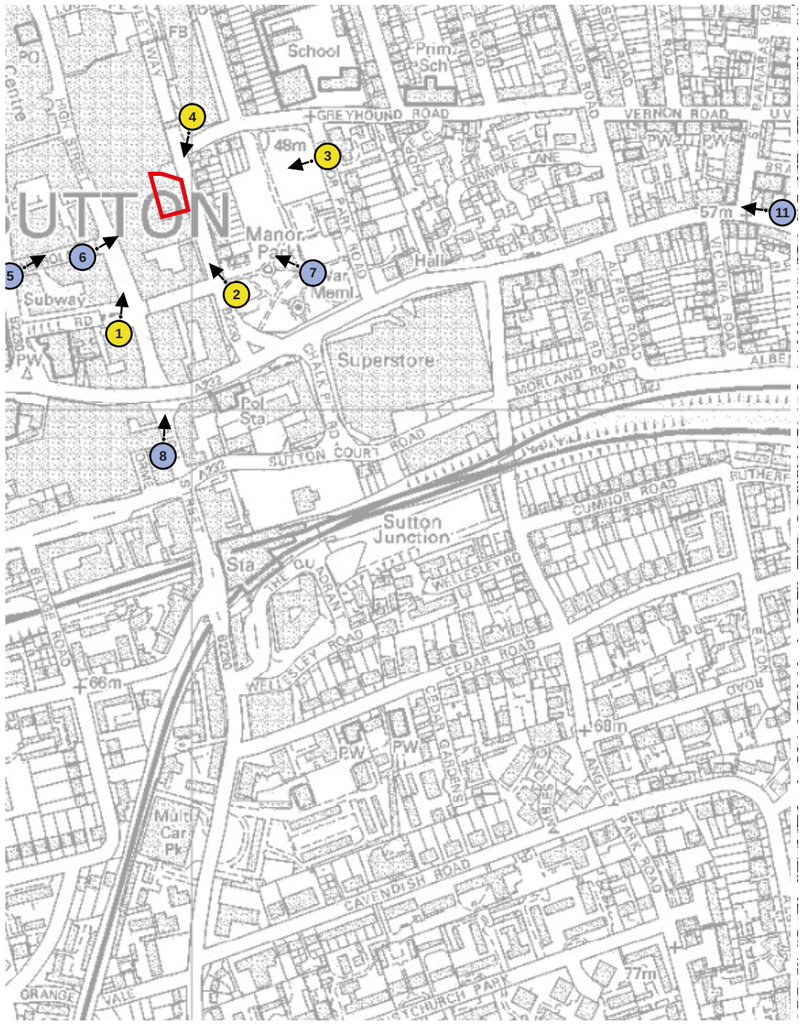
There would be a **low** degree of change.

Visual effects

The scheme would result in a relatively small change to the view and would be seen in conjunction with Aspects, an existing tall building. The character of the view would remain the lower residential townscape with taller buildings in the town centre beyond, marking its location. The proposal would have a slender, stepped form and distinctive architectural treatment and would be a positive addition to the skyline of the town centre. The proportions and materials palette would be compatible with the local townscape.

There would be a **Minor beneficial** change to the view

The cumulative image also shows the St Nicholas House scheme that has been recently granted planning permission. The proposal would be seen in conjunction with this and Aspects forming a cluster on the skyline that reinforces the legibility of the town centre.



View Location plan extract

N

Image details	
Focal length lens	50mm
Date / time	x 23/04/20;
Visualisation type	Non verified VuCity image

-

Existing

Proposed

Cumulative

Scheme for St Nicholas House

The application scheme

LICHFIELDS

020 7837 4477
info@lich elds.uk

lichfields.uk

@LichfieldsU

Appendix 4: Visualisation methodology

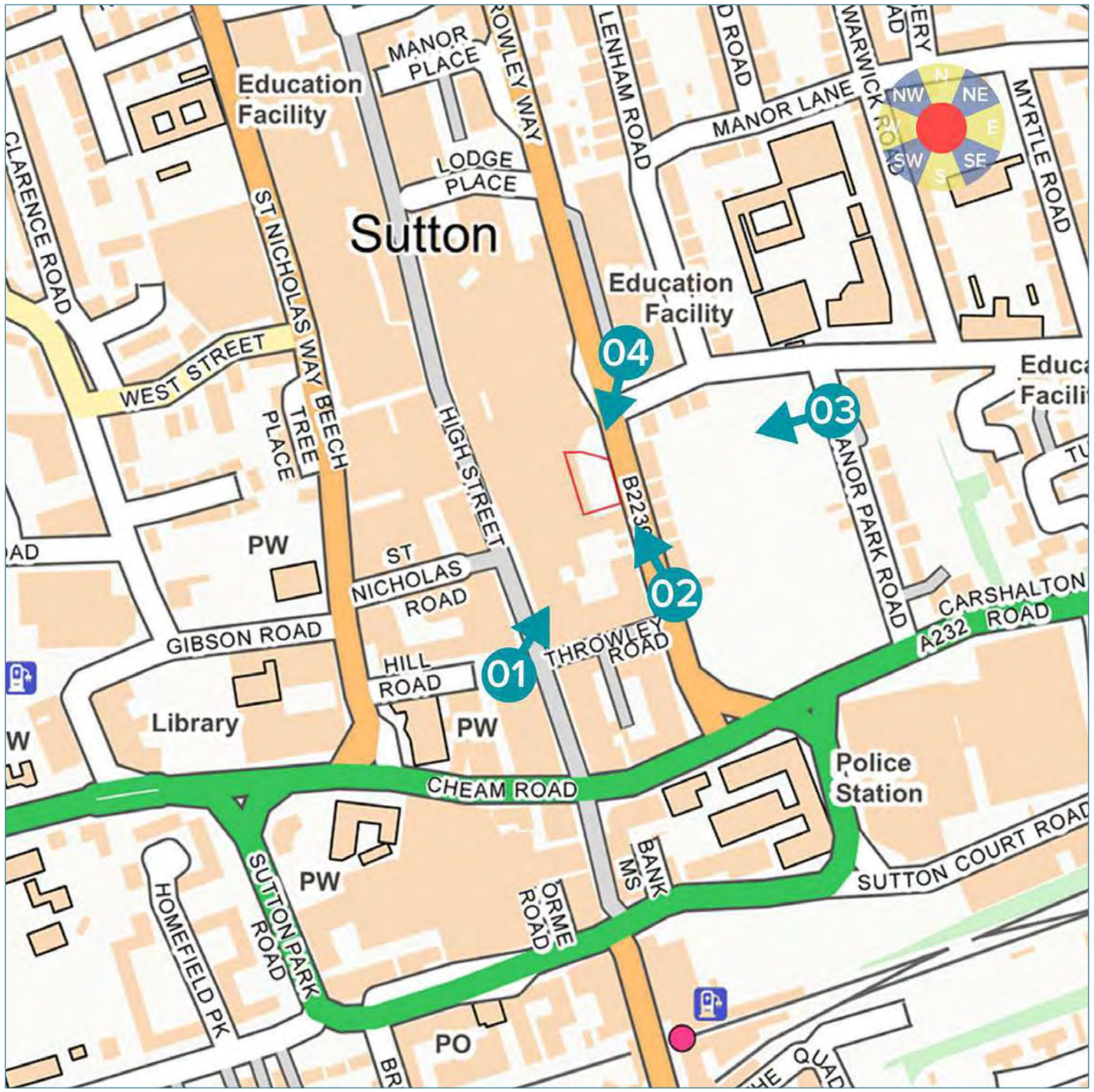
Throwley Way, Sutton
Accurate Visual Representations

Document prepared by Preconstruct Ltd on behalf of PA Housing,
in support of a planning application for the proposed development at Throwley Way, Sutton.

24th August 2020
www.preconstruct.com

Contents

01 Viewpoint Locations

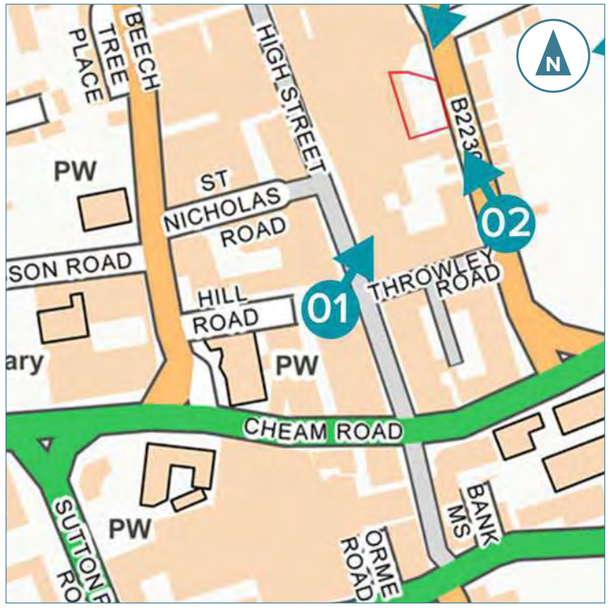


View	Description
01	View from High Street/ Trinity Square, looking north east
02	View from Throwley Way/ Entrance to Manor Park, looking north
03	View from Manor Park, looking west
04	View from Throwley Way, looking south

02 Views

View 01 - Existing

View from High Street/ Trinity Square, looking north east



VP	Description	Visualisation Type	Enlargement Factor	Distance to nearest site boundary	Easting	Northing	Ground AOD	Date / Time	Camera-Height	Camera	Lens	Focal Length	Horizon	Projection	HFoV
01	View from High Street/ Trinity Square looking north east	Type 4	100%	123m	525925.02	164096.05	53.74m	21.02.2020 10:03	1.65m	Sony ILCE-7RM4	DT 24mm F3.5 SAM	24mm	Lowered	Single Frame Landscape	73.7°

View 01 - Proposed - AVR1

View from High Street/ Trinity Square, looking north east

Proposed

Point of perspective (horizon)

View 02 - Existing

View from Throwley Way/ Entrance to Manor Park looking north

VP	Description	Visualisation Type	Enlargement Factor	Distance to nearest site boundary	Easting	Northing	Ground AOD	Date / Time	Camera-Height	Camera	Lens	Focal Length	Horizon	Projection	HFoV
02	View from Throwley Way/ Entrance to Manor Park looking north	Type 4	100%	77m	526027.36	164148.49	55.67m	21.02.2020 10:37	1.65m	Sony ILCE-7RM4	DT 24mm F3.5 SAM	24mm	Lowered	Single Frame Landscape	73.7°

View 02 - Proposed - AVR2

View from Throwley Way/ Entrance to Manor Park looking north

Proposed

Point of perspective (horizon)

View 03 - Existing

View from Manor Park, looking west

VP	Description	Visualisation Type	Enlargement Factor	Distance to nearest site boundary	Easting	Northing	Ground AOD	Date / Time	Camera-Height	Camera	Lens	Focal Length	Horizon	Projection	HFoV
03	View from Manor Park looking west	Type 4	100%	144m	526129.13	164269.14	50.14m	21.02.2020 11:27	1.65m	Sony ILCE-7RM4	DT 24mm F3.5 SAM	24mm	Lowered	Landscape	73.7°

View 03 - Proposed - AVR2

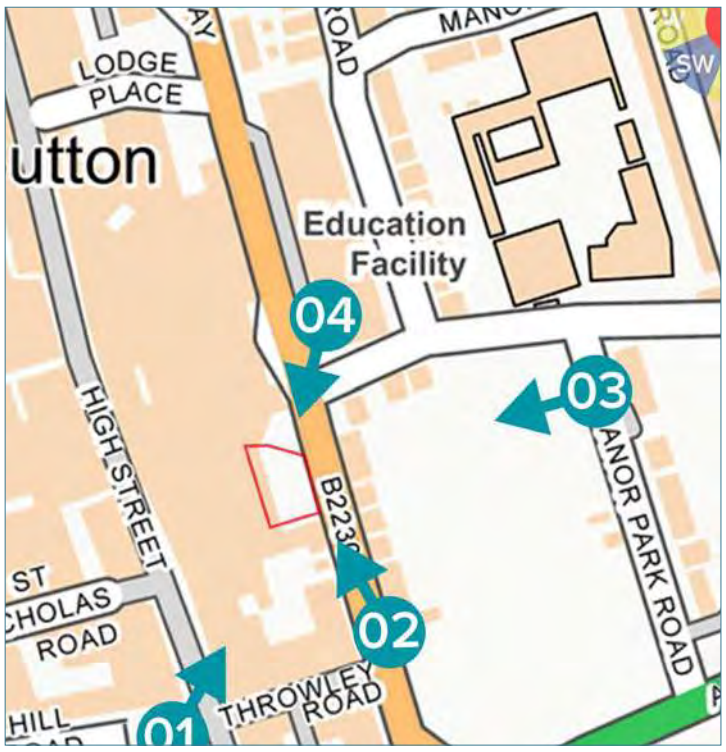
View from Manor Park, looking west

Proposed

Point of perspective (horizon)

View 04 - Existing

View from Throwley Way, looking south

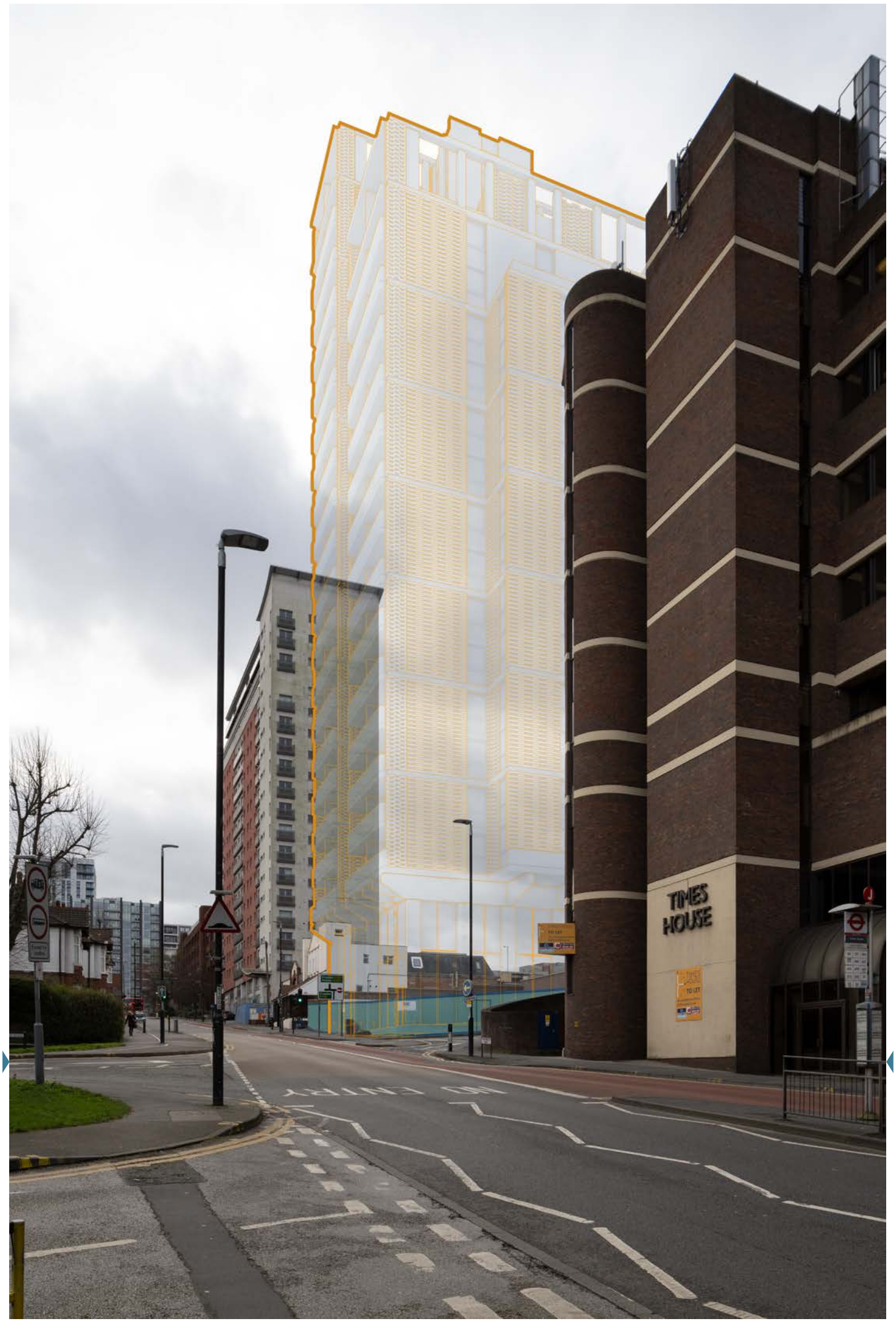


VP	Description	Visualisation Type	Enlargement Factor	Distance to nearest site boundary	Easting	Northing	Ground AOD	Date / Time	Camera-Height
04	View from Throwley Way, looking south	Type 4	100%	53m	525985.8	164302.3	46.38m	21/02/2020, 11:16:29	1.65m

Camera	Lens	Focal Length	Horizon	Projection	HFoV
Sony ILCE-7RM4	DT 24mm F3.5 SAM	24mm	Lowered	Single Frame Portrait	43.6°

View 04 - Proposed - AVR 2

View from Throwley Way, looking south



Proposed

Point of perspective (horizon)

Appendix 01 - Methodology

Overview
The process of generating verified views (also referred to as accurate visual representations / AVR) was carried out by Preconstruct.

Preconstruct use a methodology that is compliant with relevant sections of: The Landscape Institute/IEMA Guidelines for Landscape and Visual Impact Assessment (3rd edition 2013); The Landscape Institute Advice Note 01/11 Photography and Photomontage in Landscape and Visual Impact Assessment and The Revised SPG London View Management Framework (March 2012)); Visual Representation of Development Proposals Technical Guidance Note 06/19

High quality/resolution photographs were taken from the agreed locations by Preconstruct. An adequate number of visible features were subsequently surveyed, including the precise location and bearing of the camera. A development model was generated to correct geographical co-ordinates. With a known camera position and orientation, photographic and surveyed existing visible features, the development model was accurately aligned to the photograph.

Site visit
Preconstruct visited the site on the 21st February 2020, to obtain viewpoint photography. The view positions were documented using photography of the exact positions (marked with paint) which was passed on to the surveyor who later visited the site to record the precise co-ordinates.

Photography
For each agreed photoviewpoint location, a high resolution photograph was taken with a 35mm (full frame) digital SLR camera. The location at which the photograph was taken was marked with a nail, peg and / or spray paint, to allow the surveyor to record the precise location on a subsequent visit. The camera was levelled horizontally and laterally by means of a bubbled tripod head and a camera mounted spirit levels.

Lens Selection Criteria
In order to capture the full extent of the proposed development and an appropriate amount of contextual built-form and landscape a 24m Tilt/Shift lens in landscape and portrait orientation was used.

The use of tilt/shift lens(es) allowed for 'vertical rise/shift' (lowering of the horizon in frame,) while avoiding convergence of vertical elements.

A 24mm lens in portrait was selected to capture the height of the development for viewpoint 4 (VP04)

Lens Selection
24mm Tilt/Shift Lens - landscape and portrait orientation.
73.7° horizontal field of view (HFoV).

Camera Make/Model
Sony ILCE-7RM4

Lens Make/Model
- DT 24mm F3.5 SAM
- Sigma MC-11 Mount Converter - Canon EF to Sony E Mount

Tripod, Head & Others
- Manfrotto 190 aluminum
- Manfrotto MHXPRO -3WG
- Camera Mounted Spirit Level / In-Camera Digital Level
- Plumb-bob
- Street marking paint
- Marker Pen

Post Production
Each base photograph has had a level of basic colour correction applied to it so that it best represents the impression of the scene as the photographer experienced it in person.

This processing is predominately done to the 16bit RAW file using Adobe Camera Raw and Photoshop. It includes, but is not limited to, adjustments in; colour temperature and tint; levels such as exposure and contrast; shadow and highlight recovery; sky recovery through the use of gradient corrections; and other post processing effects such as sharpening and noise reduction.

Survey
For each agreed photoviewpoint location an instructional document was released to the survey subcontractor. The surveyor was instructed (by means of a marked-up photograph, map and tripod (in situ) photograph) to record a range of contextual reference points.

Survey Equipment
- Leica 1200 series GPS Smartnet enabled dual receiver (GPS and GLONASS)
- Leica Total Station (1201 or TS16 or TS15) 1' accuracy with 1000m reflectorless laser

Field Survey Methodology
- Camera locations: where possible, the camera position will be used as a setup point for the total station, enabling the re-creation of the view as seen in the imagery and reducing the risk of wrong interpretation of detail. Connection is usually via GPS Smartnet derived control points in OSGB datum and grid. 3-4 control stations are used, to ensure long distance accuracies and to identify possible outliers.
- Reference points visible in the photography are measured with reflectorless means from the total station. If long distance views have suitable detail too far from the camera station, further setups are used closer to the detail. Common visible detail points are observed from different setup points to check and increase accuracy achieved.
- Accuracies of camera positions and surveyed details will vary due to setup geometry and distance, but will typically always be below 20 centimetres.

Data Processing and Delivery
Data is processed using industry standard software (Leica GeoOffice and TerraModel) to create points listings. A3 verification plots or digital photos are marked up with the surveyed points to aid identification. All points are to OSGB36 grid and datum, to allow the use of common Ordnance Survey products and industry standard site surveys.

The Proposed Development
Preconstruct imported an Autodesk Revit 3D model of the proposed development as supplied by the project architect. The model was subsequently aligned to the OSGB36 co-ordinate system.

The Verification Process
The collected survey reference point data and camera location data was imported into the 3D model environment from the delimited text file (relative to the OSGB36 co-ordinate system) by means of a proprietary script.

At each photoviewpoint location a virtual camera was set up in the 3D software (3DS Max 2020) using the coordinates provided by the surveyor. The 3D coordinates of the survey reference points were used to create an accurate 'point cloud' model of the contextual surveyed parts of the scene. The scene was verified by matching the contextual surveyed points to the photograph. To do this, for each photoviewpoint, a 'point cloud' render* was made from the virtual camera in the 3D model. Using Adobe Photoshop CC, the photography and surveyed references from the 'point cloud' render were aligned.

Subsequently more renders were made for; the proposed building. The alignment process was repeated to provide accurate placement of the proposed build-forms within the context of the photographs.

Where proposed built form is occluded by existing context, it was masked (for AVR2). For AVR1s a dashed outline was applied to indicate occluded form.

* Rendering is the process of generating an image from a model (or models in what collectively could be called the 3D environment), by means of computer programs - specifically, in this case Chaos Group V-Ray 4.3 for Autodesk 3DS Max 2020

Printing and Viewing Distances
For general use, pages should be printed on A3 and held at a comfortable arms length.

Pages should be printed on single-sided, good quality heavy stock.

If the images are to be used in the field, contact us for printing sizes and theoretical viewing distances.

Appendix 02 - Sources of Data

Survey Data

Asset	Description	Supplier	Reference	Date	Comment
Survey Data	Table of Points (XLSX file) Surveyors notes/mark-up (PDF)	Master Maps	VV- 0073	02/03/20	Imported using proprietary script. Origin Shift -525980 E -164236 N

Supplied Data

Asset & Description	Format	Supplier	Reference	Date	Comment
	Trimble Sketchup File	Wimshurst Pelleriti Architects	2020-07-20 Throwley Way 2017_Preconstruct	22/07/20	Updated scheme design model. Model not in OS coordinate system. Model not set at correct AOD Height.
Proposed Scheme Model	Autodesk Revit File	Wimshurst Pelleriti Architects	THW-WPA-00-ZZ-M3-A-0000.rvt	21/04/20	Model not in OS coordinate system. Model not set at correct AOD Height.
Proposed Scheme Section Drawing	DWG	Wimshurst Pelleriti Architects	THW-WPA-00-ZZ-M3-A-0000 - Sheet - 0203 - PROPOSED GA SECTIONS.dwg	23/07/20	Used to assist in alignment of Proposed Model to correct AOD heights
Proposed Scheme Site Plan	DWG	Wimshurst Pelleriti Architects	THW-WPA-00-ZZ-M3-A-0000 - Sheet - 1606 - Ground Floor Site Plan.dwg mastermap-topo_2938242_0.dwg Site survey_10573-16.dwg	23/04/20 28/04/20 23/07/20	Contains OS reference. Used to assist in alignment of Proposed Model to OS coordinate system. Contains OS reference.

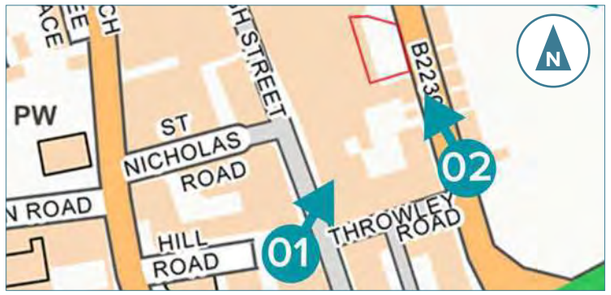
Generated/Compiled Data (by Preconstruct)

Asset	Description	Reference	Comment
3D Model / Scene	Scene files generated in 3DS Max Design 2020 to create and render model data	4756 MaxRender	

Appendix 03: AVR Verification Data

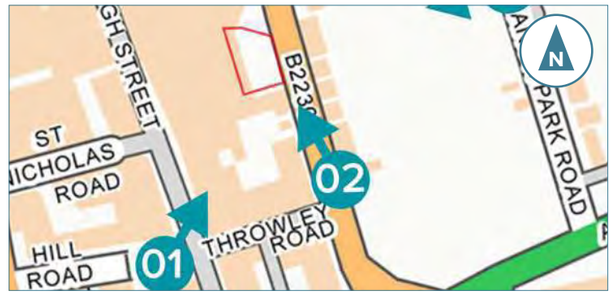
View 01 - Survey Points

View from High Street/ Trinity Square, looking north east



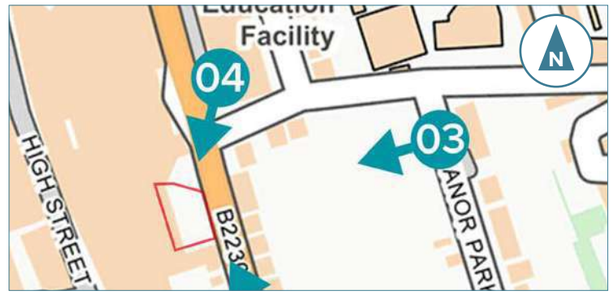
View 02 - Survey Points

View from Throwley Way/ Entrance to Manor Park looking north



View 03 - Survey Points

View from Manor Park, looking west



View 04 - Survey Points

View from Throwley Way, looking south

Survey Points Table

Point #	Eastings	Northings	Height (AOD)
V1	525925.022	164096.054	53.738
V3	526129.133	164269.138	50.141
V2B	526027.361	164148.492	55.669
V4B	525985.8	164302.3	46.38m
01C1	525922.9	164111.992	60.322
01C2	525923.148	164115.981	52.5
01C3	525947.111	164113.581	64.711
01C4	525927.686	164164.327	63.094
01C5	525916.908	164247.046	62.476
01C6	525944.222	164121.802	55.074
01C7	525930.353	164159.91	53.122
01C8	525931.306	164155.733	60.34
01C9	525939.617	164136.435	55.065
01C10	525923.111	164120.815	58.739
01C11	525941.8	164129.029	62.906
01C12	525993.847	164145.402	82.994
01C13	525930.586	164120.026	54.839
01C14	525987.044	164166.873	91.993
01C15	525921.101	164184.014	58.374
01C16	525942.058	164108.954	53.199
01C17	525925.408	164109.387	53.085
01C18	525940.246	164114.075	55.045

Point #	Eastings	Northings	Height (AOD)
01C19	525933.442	164144.977	54.682
01C20	525929.497	164162.526	56.577
01C21	525931.872	164113.281	52.49
02C1	526031.811	164160.078	63.253
02C2	526027.757	164159.411	60.206
02C3	525959.2	164262.932	79.215
02C4	525958.298	164261.811	75.921
02C5	525991.761	164203.43	63.088
02C6	526000.083	164176.942	59.214
02C7	526001.972	164182.77	54.809
02C8	526007.836	164151.594	61.383
02C9	526008.859	164148.689	71.013
02C10	526000.02	164177.155	69.37
02C11	526001.38	164172.784	87.337
02C12	526005.317	164160.319	77
02C13	525974.702	164260.063	58.906
02C14	526019.278	164187.925	60.659
02C15	526022.767	164146.371	55.727
02C16	525991.934	164217.861	54.066
02C17	525962.143	164260.276	57.832
02C18	526005.981	164170.116	54.196
02C19	526013.625	164145.69	55.729

Point #	Eastings	Northings	Height (AOD)
02C20	525979.985	164302.165	54.468
02C21	526016.139	164162.699	54.548
03C1	525975.462	164269.267	80.175
03C2	525999.976	164178.491	116.594
03C3	526013.4	164133.268	112.595
03C4	525839.801	164188.698	84.496
03C5	525837.155	164198.871	81.444
03C6	526066.644	164286.828	50.558
03C7	526082.625	164238.018	51.879
03C8	526087.487	164225.093	52.473
03C9	526007.659	164152.57	100.983
03C10	526014.512	164131.642	93.878
03C11	526029.404	164269.789	53.753
03C12	526017.976	164266.001	55.711
03C13	526003.175	164166.797	88.991
03C14	525977.598	164266.89	72.785
03C15	526031.348	164190.628	57.349
03C16	526012.207	164138.469	88.99
03C17	526083.492	164250.258	52.201
03C18	525999.057	164177.632	86.399
03C19	526021.418	164210.348	60.387
03C20	526051.364	164282.727	51.257

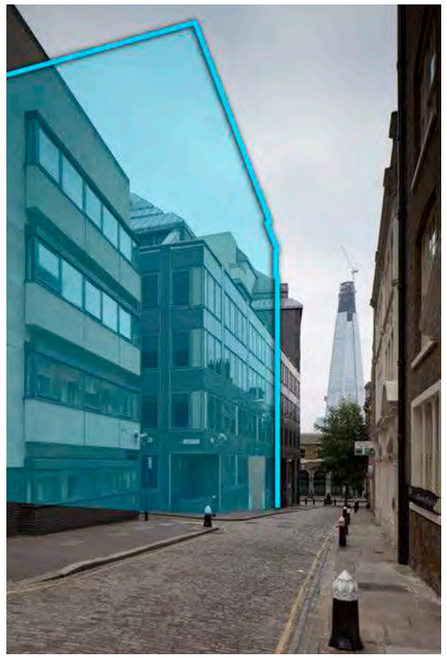
Point #	Eastings	Northings	Height (AOD)
03C21	526078.594	164254.251	50.106
04C1	526005.831	164261.234	52.632
04C2	526002.241	164248.968	57.043
04C3	525989.034	164206.516	62.401
04C4	525994.92	164176.073	68.028
04C5	525984.323	164244.997	52.199
04C6	525979.271	164267.193	53.548
04C7	525969.15	164279.859	57.668
04C8	525996.066	164257.697	51.706
04C9	525983.648	164204.765	59.812
04C10	525982.091	164204.275	60.915
04C11	526001.917	164264.467	48.783
04C12	525984.298	164204.939	56.375
04C13	525978.082	164292.101	47.841
04C14	525970.205	164273.433	64.444
04C15	525993.829	164175.751	111.143
04C16	525998.815	164177.307	99.341
04C17	525970.575	164212.032	56.042
04C18	526003.479	164261.949	49.776
04C19	525981.948	164293.882	46.626
04C20	525986.866	164285.487	47.147
04C21	525981.815	164265.954	57.625

Appendix 04: AVR Type Description

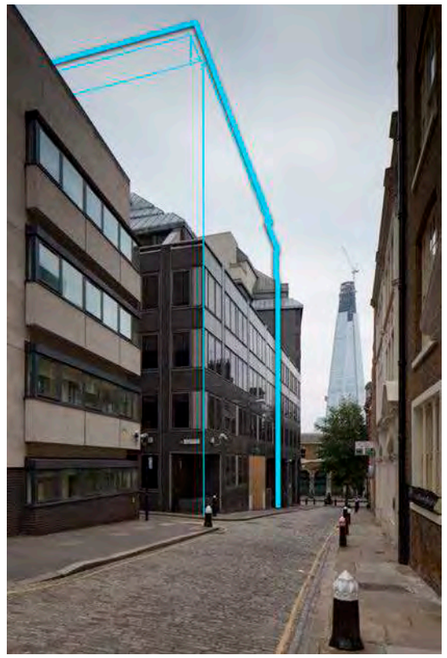
Text extracted from The London View Management Framework (SPG March 2012 - Part 3, page 248) Appendix C: Accurate Visual Representations.

"To assist agreement between all parties prior to AVR preparation, the following classification types are presented to broadly define the purpose of an AVR in terms of the visual properties it represents. This classification is a cumulative scale in which each level incorporates all the properties of the previous level."

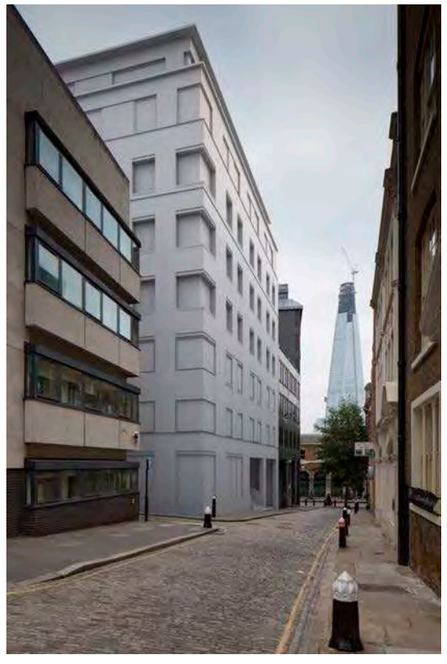
AVR (Level) 0	Location and size of proposal
AVR (Level) 1	Location, size and degree of visibility of proposal
AVR (Level) 2	As level 1 + description of architectural form
AVR (Level) 3	As level 2 + use of materials



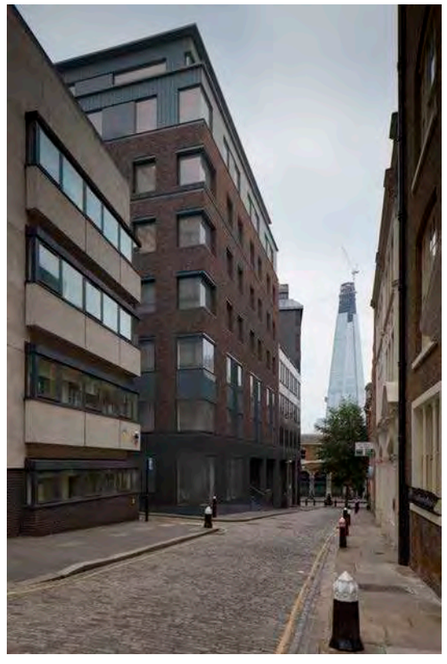
AVR0
Showing location and size (in this case as a toned area superimposed on photograph)



AVR1
Confirming degree of visibility (in this case as an occluded 'wireline' image)



AVR2
Explaining architectural form (in this case as a simply shaded render in a uniform opaque material)



AVR3
Confirming the use of materials (in this case using a 'photorealistic' rendering technique)

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