## Appendix A: Glossary

## Glossary of words and phrases used throughout this SPG:

## Accurate Visual Representation (AVR)

A still image, or animated sequence of images, intended to convey reliable visual information about a proposed development to assist the process of visual assessment.

## Assessment Point

An Assessment Point is considered to be the optimum viewing point and is the reference point for the assessment of a view. An Assessment Point is formally identified by Ordnance Survey northing and easting grid references in the Management Plans.

## Backdrop

The backdrop is the background to a Strategically Important Landmark or focus of the view. It is distinct from a background area that extends away from the foreground or middle ground into the distance.

## Canyon effect

The effect that can occur when tall buildings are constructed in the area either side of a Landmark Viewing Corridor or Wider Setting Consultation Area.

## Designated View

The London Plan, Chapter 7, Table 7.1
designated twenty-seven strategically important views of London. The proposed management of these views is defined in this SPG.

## Foreground and Middle Ground

These are the foreground of Designated Views and the area between the foreground and a specified landmark (or the general skyline).

They are also referred to in the Replacement London Plan and this SPG as the front and middle ground assessment areas.

## Landmarks

Buildings and structures, other than Strategically Important Landmarks, that are visually or culturally prominent in Designated Views.

## Landmark Viewing Corridor

Part of a Protected Vista, a Landmark Viewing Corridor is defined between the Assessment Point and the Strategically Important Landmarks of St Paul's Cathedral, the Palace of Westminster and the Tower of London. Development above the threshold plane of this corridor will be refused in accordance with London Plan Policy 7.11, 7.12, and 7.10 where relevant.

## Linear View

A view in which key landmarks are seen through narrow gaps between buildings or landscaping.

## London Panorama

A broad prospect seen from an elevated public viewing place.

## Management Plan

A site-specific analysis and set of management guidance, which sets out how a Designated View should be managed.

## Outstanding Universal Value

Cultural and/or natural significance that is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity.

## Prominent buildings

Prominent buildings are visible in the Designated View by virtue of their size and/or location. Reference to them in this SPG does not infer that they have notable townscape qualities or value.

## Protected Silhouette

The 'Protected Silhouette' specification indicates the part of the silhouette of a World Heritage Site that should not be changed by development appearing in its background.

## Protected Vista

A geometrically defined corridor between an Assessment Point and a Strategically Important Landmark. The Protected Vista controls the effect of development in the foreground, middle ground and background of a view of a Strategically Important Landmark.

## River Prospect

Short and longer distance visual experiences of the Thames riverscape.

## Strategically Important Landmarks

A prominent building or structure in the townscape, which has visual prominence, provides a geographical or cultural orientation point and is aesthetically attractive through visibility from a wider area or through contrast with objects or buildings close by. The Strategically Important Landmarks in this Draft SPG are St Paul's Cathedral, the Palace of Westminster and the Tower of London.

## Supplementary Planning Guidance (SPG)

The London Plan anticipates the requirement for supplementary documents to clarify certain policies contained in the statutory plan. While only the policies in the London Plan can have the status that the GLA Act 1999 provides in considering planning applications, SPGs can be taken into account as a further material consideration.

## Threshold Plane

A threshold plane is a geometrically defined height within the Protected Vista

## Townscape View

Designated views which focus on architecturally and culturally important groups of buildings that can be enjoyed from well managed public spaces.

## Viewing Location

The general part of a Viewing Place from which a particular view may best be appreciated. There may be one or more Viewing Locations in each Viewing Place.

## Viewing Place

A public space from which Designated Views are defined by the London Plan. Within each Viewing Place, this SPG defines one or more Viewing Locations.

## Visual Management Guidance

Provides specific guidance on the management of the character and landmarks within the Designated Views.

## Wider Setting Consultation Area

The area enclosing the Landmark Viewing Corridor in both the foreground and middle ground, and background of the Protected Vista. A development threshold plane is defined in the relevant Management Plan, above which developments in this area must be referred to the Mayor and other consultees.

## World Heritage Site Management Plan

Provides guidance to manage a World Heritage Site to ensure that its Outstanding Universal Value is protected.

## Appendix B: Assessment Point Details

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## Assessment Point Details

Camera

| AP | Easting | Northing | Ground level | Camera Height | Camera Height (AOD) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| London Panoramas |  |  |  |  |  |
| 1A. 1 | 529611.2 | 189963.7 | 93.0 | 1.1 | 94.1 |
| 1A. 2 | 529710.3 | 190072.2 | 92.4 | 1.6 | 94.0 |
| 2A. 1 | 527665.4 | 186131.5 | 96.5 | 1.6 | 98.1 |
| 2A. 2 | 527665.4 | 186131.5 | 96.5 | 1.6 | 98.1 |
| 2B. 1 | 528043.1 | 186154.5 | 70.0 | 1.6 | 71.6 |
| 3A. 1 | 527270.1 | 187486.2 | 112.6 | 1.6 | 114.1 |
| 4A. 1 | 527657.3 | 183893.0 | 66.7 | 1.6 | 68.3 |
| 4A. 2 | 527657.3 | 183893.0 | 66.7 | 1.6 | 68.3 |
| 5A. 1 | 538922.5 | 177335.2 | 47.2 | 1.1 | 48.3 |
| 5A. 2 | 538936.1 | 177334.5 | 47.2 | 1.6 | 48.8 |
| 6A. 1 | 538238.2 | 176823.1 | 46.0 | 1.6 | 47.6 |
| Linear Views |  |  |  |  |  |
| 7A. 1 | 529964.3 | 180301.8 | 7.6 | 1.6 | 9.2 |
| 8 A. 1 | 530326.9 | 179773.9 | 6.8 | 1.6 | 8.4 |
| 9 A .1 | 518605.8 | 173150.4 | 57.5 | 1.6 | 59.1 |
| River Prospects |  |  |  |  |  |
| 10A. 1 | 533665.0 | 180311.4 | 13.2 | 1.6 | 14.8 |
| 11A. 1 | 532769.2 | 180394.3 | 13.0 | 1.6 | 14.6 |
| 11B. 1 | 532819.2 | 180487.5 | 15.1 | 1.6 | 16.7 |
| 11B. 2 | 532803.4 | 180406.2 | 13.5 | 1.6 | 15.1 |
| 12A. 1 | 532357.5 | 180612.7 | 13.1 | 1.6 | 14.7 |
| 12A.2 | 532387.0 | 180700.6 | 11.2 | 1.6 | 12.8 |
| 12B. 1 | 532386.3 | 180647.1 | 12.3 | 1.6 | 13.9 |
| 13A. 1 | 532051.5 | 180619.3 | 12.8 | 1.6 | 14.4 |
| 13B. 1 | 532110.6 | 180548.6 | 5.0 | 1.6 | 6.6 |
| 14A. 1 | 531629.0 | 180698.4 | 12.9 | 1.6 | 14.5 |
| 15A. 1 | 530806.0 | 180465.1 | 15.0 | 1.6 | 16.6 |
| 15A.2 | 530703.3 | 180638.4 | 14.8 | 1.6 | 16.4 |
| 15B. 1 | 530723.6 | 180651.2 | 14.8 | 1.6 | 16.4 |
| 15B. 2 | 530792.2 | 180535.6 | 15.0 | 1.6 | 16.6 |
| 16A. 1 | 530931.0 | 180441.6 | 5.2 | 1.6 | 6.8 |
| 16B.1 | 531193.8 | 180530.4 | 5.3 | 1.6 | 6.9 |

## Camera

| AP | Easting | Northing | Ground level | Camera Height | Camera Height (AOD) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 16B.2 | 531202.7 | 180528.7 | 5.3 | 1.6 | 6.9 |
| 17A.1 | 530662.9 | 180177.2 | 12.0 | 1.6 | 13.6 |
| 17A.2 | 530454.6 | 180274.1 | 11.9 | 1.6 | 13.5 |
| 17B.1 | 530470.6 | 180325.7 | 12.0 | 1.6 | 13.6 |
| 17B.2 | 530521.7 | 180301.9 | 12.0 | 1.6 | 13.6 |
| 18A.1 | 530591.9 | 179640.8 | 8.6 | 1.6 | 10.2 |
| 18A.2 | 530463.0 | 179650.1 | 10.6 | 1.6 | 12.2 |
| 18A.3 | 530352.0 | 179652.5 | 9.0 | 1.6 | 10.6 |
| 18B.1 | 530339.0 | 179677.9 | 8.8 | 1.6 | 10.4 |
| 18B.2 | 530573.2 | 179673.1 | 9.1 | 1.6 | 10.7 |
| 19A.1 | 530382.3 | 178970.2 | 11.6 | 1.6 | 13.2 |
| 19A.2 | 530508.9 | 178952.1 | 8.1 | 1.6 | 9.7 |
| 20 A.1 | 530332.4 | 179824.7 | 5.8 | 1.6 | 7.4 |
| 20B.1 | 530548.3 | 180509.9 | 3.9 | 1.6 | 5.5 |
| 21 A.1 | 530597.8 | 179758.1 | 5.1 | 1.6 | 6.7 |
| 21 B.1 | 530630.5 | 180044.5 | 5.4 | 1.6 | 7.0 |
| 22A.1 | 530538.5 | 179140.7 | 4.6 | 1.6 | 6.2 |
| $22 A .2$ | 530570.0 | 179463.7 | 4.5 | 1.6 | 6.1 |
| 22A.3 | 530584.1 | 179609.7 | 4.5 | 1.6 | 6.1 |


| Townscape Views |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 23A. 1 | 526927.2 | 180167.2 | 20.4 | 1.6 | 22.0 |
| 24A. 1 | 538392.1 | 178295.2 | 5.1 | 1.6 | 6.7 |
| 24A. 2 | 538331.0 | 178272.7 | 5.2 | 1.6 | 6.8 |
| 24A. 3 | 538456.3 | 178324.9 | 5.0 | 1.6 | 6.6 |
| 25A. 1 | 533485.6 | 180201.2 | 4.5 | 1.6 | 6.1 |
| 25A. 2 | 533428.1 | 180230.1 | 4.9 | 1.6 | 6.5 |
| 25A. 3 | 533550.0 | 180168.1 | 4.4 | 1.6 | 6.0 |
| 26A. 1 | 529529.4 | 179798.8 | 3.1 | 1.6 | 4.7 |
| 27A. 1 | 530066.5 | 179590.7 | 5.0 | 1.6 | 6.6 |
| 27A. 2 | 530076.3 | 179582.4 | 4.8 | 1.6 | 6.4 |
| 27B. 1 | 530087.0 | 179686.5 | 5.1 | 1.6 | 6.7 |
| 27B. 2 | 530137.4 | 179683.9 | 5.4 | 1.6 | 7.0 |



## Appendix C: Accurate Visual Representations

Under the View Management Framework proposed by the London Plan, the primary tool for the protection and enhancement of key views of London is by visual assessment and analysis of impact. This process involves the assessment of both positive and negative effects of proposed development on views designated by the London Plan, with reference to a series of visual management principles - some general and some site specific. The assessment of the visual impact of new development will be based on a variety of materials submitted by the proposer of the development and by others who may have interest in the project. This material may include architectural drawings, physical models, reference photography of completed developments and images of various types, generated either by hand or using computer software.

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

It is recommended that AVR positions should be selected on site and that wherever possible, formal assessment of an AVR should take place in the field.

This Appendix covers three topics:

- Selection of an appropriate field of view for each AVR
- Defining the visual properties that are shown by a specific AVR
- Documenting each AVR, to reassure assessors as to the usefulness and veracity of the visual information they are reviewing, and if required, to allow replication


## Selecting an appropriate field of view

Creators and users of AVRs need to be aware of issues that arise from the inevitable approximations between the rich human perception of the environment and the relatively low resolution, generally static media used to represent buildings in their context. Many of these limitations are shared with photography and cinematography and arise from the need to approximate the three-dimensional environment that surrounds the viewer using the flat rectangle of a perspective drawing, photograph or screen.

As we experience a scene, our perception is built from a sophisticated visual process that allows us to focus onto individual areas with remarkable clarity whilst remaining aware of a wider overall context. When recording a scene as a photograph or video sequence much more finite decisions must be taken to depict a specific area of interest. In selecting this area of interest, a choice must therefore be made between showing the detail of the proposal in the greatest clarity and placing it into a meaningful context.


Table comparing Horizontal Field of View (HFOV) with lens sizes for three common camera formats, illustrating the choice to be made between level of detail and amount of context to be included.

The selection of an area of interest is defined by the choice of lens and any subsequent cropping of the image. To make clear the process that has been followed, an AVR should clearly indicate the original centre of view (more accurately the "Optical Axis") and the resulting field of view. This can be defined numerically by angular dimensions on each side of the Optical Axis or graphically by suitable annotations to the perimeter of the image.


AVR image annotated to show a $50^{\circ}$ Horizontal Field of View. By indicating the optical axis the author also makes clear that vertical rise has been used by the photographer to include the relevant context whilse avoiding converging verticals

Creators of AVRs should make clear in their method statements the criteria used to select appropriate fields of view for a particular study. In addition, for each AVR clear information must be provided to explain the resulting field of view used, in order to permit sensible comparison between AVRs, both within a single study and across studies.

Users of AVRs should be aware that photographic or computer images most closely match our perception of shape at the optical axis this being the line that passes from the eye point to the target or look-at point, or in photographic terms the centreline of the lens. As angular distances increase away from this line, while the relative positions of objects remains correct, their perceived shape may be less familiar than when we look directly toward them. For this reason, the representation of the proposed development should ideally occur close to the optical axis, i.e. towards the centre of the image.

Where a proposal needs to be shown in a broad context choices must be made between using wide angle photography, which may give rise to less natural perspective at the edges of the images or by combining additional images taken from the same position. Where this latter technique has been used AVRs should include additional annotation to indicate how images have been combined.


AVR image annotated to show that a wider field of view has been used to include a relevant townscape context. The proposal and the existing tower at 30 St Mary's Axe lie within the central area of the image and thereby avoid obvious distortion

## Defining the purpose of an AVR

473 By accurately combining an image of a proposed development with a representation of its existing context, all AVRs explain the location and massing of a proposed development. They may also illustrate additional properties including the degree of visibility, architectural form or choice of materials selected. In their most sophisticated form they give a very useful impression of how a completed development would look in its environment under specific lighting and weather conditions. When complex AVRs are requested, more time is required and therefore costs rise. For this reason the assessors of a project should be careful to only request AVRs of a type which show the properties which need to be assessed from a specific location.

474 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


AVRO
Showing Location and Size (in this case as a toned area superimposed on photograph)


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


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


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

Information required: Annotation and Method Statements
Within the broad classifications by purpose and angle of view mentioned above, there remains a wide variety of potential production techniques, graphical styles and delivery formats available for AVRs. Indeed the range of options continues to increase as new technologies become available and new practitioners propose more subtle or sophisticated ways to transpose such an intrinsically complex visual experience as observing a city into convenient, durable and portable media.

This being the case it is important that each set of AVRs prepared to assist the Qualitative Visual Assessment of a new proposal should be accompanied by a well written, helpful statement confirming the techniques employed and the decisions made. This 'method statement' should contain sufficient detail to allow assessors to understand the documents presented, conduct reliable comparisons between AVRs within the same set and allow AVRs prepared under one methodology to be compared with others prepared using another. Method statements should be expressed in non-specialist terminology which is comprehensible to the wide range of professional disciplines likely to be involved in Qualitative Visual Assessment.

As a minimum, a method statement should contain:

- The name and contact details of the company preparing the AVRs
- The process used to select the viewpoints for inclusion in the study and to determine the representation type to be used
- Any general policies applied with regard to angle of view, cropping or use of multiple images
- Descriptions of the procedures used to accurately determine the size and location of the proposals and any comments on the accuracy of this process
- Descriptions of the processes used to determine the degree to which the proposals are actually visible in the view (AVR Level 1 and above) and notes on how occluded parts of the proposal are shown
- Descriptions of the processes used to add architectural detail to the representation (AVR Level 2) and how this has been represented graphically
- Descriptions of the processes used to represent the appearance of the proposed materials (AVR Level 3) and notes on the limitations of the techniques used

478 For each individual AVR the following information should be provided:

- Unique identification code
- Textual description of viewpoint location and direction of view
- Time of day and date for any source photography or video
- Map and site photography showing location of camera position
- Co-ordinates of camera position
- Peripheral annotation to the image to confirm the direction of view in the original photography (the optical axis)
- Definition of the field of view depicted each side of the optical axis, either in the form of peripheral annotation, textual description or more sophisticated maps
- AVR type i.e. which visual properties are shown

Where an AVR has used more than a single base image to represent the existing context, e.g. a moving sequence or a "stitched" Panorama, then the requirements above should be adapted to convey the key data required to explain the construction of the AVR and where necessary to verify its accuracy.

In addition to the minimum specifications listed above, it is recommended that companies preparing AVRs should include as much information as may be required to allow full confidence in the processes used in the study.


## Appendix D: Protected Vistas

481 The following pages provide detailed definitions for the 13 Protected Vistas defined in this SPG. They should be read together with the Management Plans related to the relevant Assessment Point. The information provided for each Protected Vista is explained below.


## Protected Vista from Assessment Point 1A. 2

from: Alexandra Palace: the viewing terrace - approaching from the north-eastern carpark to: St Paul's Cathedral



## Protected Vista from Assessment Point 2A. 1

from: Parliament Hill: the summit - looking toward St Paul's Cathedral to: St Paul's Cathedral



## Protected Vista from Assessment Point 2A. 2

from: Parliament Hill: the summit - looking toward the Palace of Westminster to: Palace of Westminster



## Protected Vista from Assessment Point 2B. 1

from: Parliament Hill: east of the summit - at the prominent oak tree
to: Palace of Westminster


| Viewing Corridor (VC) |  |  |  |
| :---: | :---: | :---: | :---: |
| a | 528,043.1E | 186,154.5N | 71.6 mAOD |
| c | 530,367.5E | 179,529.6N | 51.3 mAOD |
| d | 530,158.7E | 179,460.0N | 51.3 mAOD |
| Length (ab) |  |  | 7,020.0m |
| Width at monument (cd) |  |  | 220.0 m |
| Defining point at Palace of Westminster |  |  |  |
| b | 530,263.1E | 179,494.8N | 51.3mAOD |
| Background Wider Setting Consultation Area (BWSCA) |  |  |  |
| c | 530,367.5E | $179,529.6 \mathrm{~N}$ | 51.3 mAOD |
| y | 531,526.3E | 176,226.6N | 51.3 mAOD |
| z | 531,213.6E | 176,122.3N | 51.3 mAOD |
| d | 530,158.7E | 179,460.0N | 51.3 mAOD |
| Length (bx) |  |  | 3,500.0m |



## Protected Vista from Assessment Point 3A. 1

from: Kenwood: the viewing gazebo - in front of the orientation board to: St Paul's Cathedral



## Protected Vista from Assessment Point 4A. 1

from: Primrose Hill: the summit - looking toward St Paul's Cathedral to: St Paul's Cathedral



## Protected Vista from Assessment Point 4A. 2

from: Primrose Hill: the summit - looking toward the Palace of Westminster to: Palace of Westminster


| Viewing Corridor (VC) |  |  |  |
| :---: | :---: | :---: | :---: |
| a | 527,657.3E | 183,893.0N | 68.3 mAOD |
| c | 530,392.2E | 179,571.3N | 43.5 mAOD |
| d | 530,134.0E | 179,418.3N | 43.5 mAOD |
| Length (ab) |  |  | 5,112.2m |
| Width at monument (cd) |  |  | 300.0 m |
| Defining point at Palace of Westminster |  |  |  |
| b | 530,263.1E | 179,494.8N | 43.5 mAOD |
| Background Wider Setting Consultation Area (BWSCA) |  |  |  |
| c | 530,392.2E | 179,571.3N | 43.5 mAOD |
| y | 532,264.5E | 176,612.4N | 43.5 mAOD |
| z | 531,829.7E | 176,354.8N | 43.5 mAOD |
| d | 530,134.0E | 179,418.3N | 43.5 mAOD |
| Length (bx) |  |  | 3,500.0m |



## Protected Vista from Assessment Point 5A. 2

from: Greenwich Park: the General Wolfe statue - north-east of the statue
to: St Paul's Cathedral


N.B. Point "a" defining the VC is not at the same height as Assessment Point 5A.2.

| Viewing Corridor to Tower Bridge (VC1) |  |  |  |
| :---: | :---: | :---: | :---: |
| a | 538,936.1E | 177,334.5N | 30.0 mAOD |
| n | 533,641.7E | 180,189.6N | 30.0 mAOD |
| - | 533,704.7E | 180,303.4N | 30.0 mAOD |
| Length (am) |  |  | 6,014.8m |
| Defining point at Tower Bridge |  |  |  |
| m | 533,673.2E | 180,246.5N | 30.0 mAOD |
| Wider Setting Consultation Area 1 (East) (WSCA1(E)) |  |  |  |
| a | 538,936.1E | 177,334.5N | 0.0mAOD |
| p | 533,617.7E | 180,146.1N | 30.0mAOD |
| n | 533,641.7E | 180,189.6N | 30.0 mAOD |
| Wider Setting Consultation Area 2 (East) (WSCA2(E)) |  |  |  |
| a | 538,936.1E | 177,334.5N | 30.0 mAOD |
| - | 533,704.7E | 180,303.4N | 30.0 mAOD |
| q | 533,728.7E | 180,346.9N | 30.0 mAOD |
| Background Wider Setting Consultation Area (BWSCA) |  |  |  |
| $v$ | 531,981.8E | 181,011.0N | 52.1 mAOD |
| y | 528,887.0E | 182,647.0N | 53.6 mAOD |
| z | 529,096.9E | 183,026.3N | 53.6 mAOD |
| w | 532,127.0E | 181,273.4N | 52.1 mAOD |
| Length (bx) |  |  | 3,500.0m |
| Viewing Corridor to St Paul's Cathedral (VC2) |  |  |  |
| n | 533,641.7E | 180,189.6N | 50.6 mAOD |
| c | 532,013.2E | 181,067.8N | 52.1 mAOD |
| d | 532,095.6E | 181,216.6N | 52.1 mAOD |
| - | 533,704.6E | 180,303.4N | 50.6 mAOD |
| Length (mb) |  |  | 1,850.0m |
| Width at monument (cd) |  |  | 170.0m |
| Defining point at St Paul's Cathedral |  |  |  |
| b | 532,054.4E | 181,142.2N | 52.1 mAOD |
| Wider Setting Consultation Area 1 (West) (WSCA1(W)) |  |  |  |
| p | 533,617.6E | 180,146.1N | 50.6 mAOD |
| $v$ | 531,981.8E | 181,011.0N | 52.1 mAOD |
| c | 532,013.2E | 181,067.8N | 52.1 mAOD |
| $n$ | 533,641.7E | 180,189.6N | 50.6 mAOD |
| Width at monument (vc) |  |  | 65m |
| Wider Setting Consultation Area 2 (West) (WSCA2(W)) |  |  |  |
| - | 533,704.6E | 180,303.4N | 50.6 mAOD |
| d | 532,095.6E | 181,216.6N | 52.1 mAOD |
| w | 532,127.0E | 181,273.4N | 52.1 mAOD |
| q | 533,728.7E | 180,346.9N | 50.6 mAOD |
| Width at monument (dw) |  |  | 65m |



## Protected Vista from Assessment Point 6A. 1

from: Blackheath Point - near the orientation board
to: St Paul's Cathedral



## Protected Vista from Assessment Point 8A. 1 <br> from: Westminster Pier - the orientation plaque <br> to: St Paul's Cathedral




## Protected Vista from Assessment Point 9A. 1

from: King Henry VIII's Mound - the viewing point
to: St Paul's Cathedral



## Protected Vista from Assessment Point 23A. 1

from: Bridge over the Serpentine - at the centre of the bridge
to: Palace of Westminster


| a | 526,927.2E | 180,167.2N | 22.0 mAOD |
| :---: | :---: | :---: | :---: |
| c | 530,271.0E | 179,534.0N | 48.5 maod |
| d | 530,228.5E | 179,323.3N | 48.5 maod |
|  | Length (ab) |  | 3,403.0m |
|  | Width at monum | (d) | 215.0 m |
|  | Defining point at Palace of Westminster |  |  |
| b | 530,263.1E | 179,494.8N | 48.5mAOD |
| Background Wider Setting Consultation Area (BWSCA) |  |  |  |
| c | 530,271.0E | 179,534.0N | 48.5 mAOD |
| v | $533,710.1 \mathrm{E}$ | 178,882.8N | 75.8 mAOD |
| $z$ | 533,624.0E | 178,455.2N | 75.8mAOD |
| d | 530,228.5E | 179,323.3N | 48.5 mAOD |
| Length (bx) |  |  | 3,500.0m |




## Protected Vista from Assessment Point 25A. 1

from: The Queen's Walk at City Hall - foot of pathway from Potter's Fields
to: The White Tower


| a | 533,485.6E | 180,201.2N | 6.1 mAOD |
| :---: | :---: | :---: | :---: |
| c | 533,572.4E | 180,546.5N | 6.1 mAOD |
| d | 533,656.2E | 180,513.7N | 6.1 maOD |
|  | Length (ab) |  | 53.2 m |
|  | Width at monument (cd) <br> Defining point at Tower of London |  |  |
|  |  |  |  |
| b | 533,614.3E | 180,530.1N | 6.1 maod |
| Background Wider Setting Consultation Area (BWSCA) |  |  |  |
| c | 533,572.4E | 180,546.5N | 25.7 mAOD |
| y | 534,186.8E | 182,990.7N | 164.6 mAOD |
| $z$ | 534,863.8E | 182,725.7N | 164.6 mAOD |
| d | 533,656.2E | 180,513.7N | 25.7 mAOD |
| Length (bx)2,500.0 |  |  |  |



$\square$

# Appendix E: Calculating the height of the consultation plane for a Protected Vista 

482 Where a site falls within the plan area of any of the Protected Vistas defined in this SPG a calculation should be performed to determine whether the height of the proposed development will trigger wider consultation with neighbouring boroughs and relevant statutory bodies (see Table 2 - Statutory Consultees for Protected Vistas). Specifically a test should be carried to determine whether any part of the proposed development will exceed the defined consultation threshold.

483 For sites that lie within the Wider Setting Consultation Area, a simple calculation can be carried out using the method of similar triangles to determine the threshold height at the site based on the relative distances from the Assessment Point to the site and to the Landmark.

484
If part of a site lies within a Landmark Viewing Corridor, development has the potential to block the view toward a Strategically Important Landmark. In these cases a more precise calculation should be carried out that takes into account the Curvature of the Earth and Refraction of Light.

## Sites that lie within the Wider Setting Consultation Area of a Protected Vista

485 From Appendix B note the OS Easting, OS Northing and height Above Ordnance Datum of the of the Assessment Point (Ax,Ay,Az) and the Landmark ( $\mathrm{Bx}, \mathrm{By}, \mathrm{Bz}$ ) for the relevant Protected Vista.

486 Determine the co-ordinates of a test point P within the development site and the point Q that lies closest to point P on the line AB . Using Pythagoras or measurement in a CAD or GIS system, calculate the lengths L1 and L2 that correspond to the distances in plan AQ (L1) and AB (L2)


487 It is now possible to determine the threshold height at point $\mathrm{Q}(\mathrm{Qz})$ using the method of similar triangles, i.e..
$Q z=A z+L 1 / L 2 *(B z-A z)$
488 The threshold height of the consultation plane at the test point $P$ within the site $(\mathrm{Pz})$ is the same as the calculated threshold height at point $\mathrm{Q}(\mathrm{Qz})$.

489 In determining the height of the consultation threshold in the background of a Protected Vista, first establish whether the line of site from the Assessment Point to the Landmark is rising or falling. In cases where it is falling, i.e. where Assessment Point (Az) is higher than the defined point on the Landmark (Bz) the height of the background consultation plane is defined explicitly in Appendix D.

490
It cases where the Assessment Point is lower than the Landmark then a similar approach to that taken in the foreground may be used to find the consultation threshold in the background of a Wider Setting Consultation Area. Hence in the case of a site at point $S$, the calculations can be carried out with respect to point $T$ that lies on the projection of the line $A B$. In this case, the lengths L1 and $L 2$ correspond to the distances in plan $A T$ and $A B$ and the height of the consultation plane at point $T(T z)$ is given by the formula:
$T z=A z+L 1 / L 2^{*}(B z-A z)$

The threshold height of the consultation plane at the test point $S$ within the site $(\mathrm{Sz})$ is the same as the calculated threshold height at point $\mathrm{T}(\mathrm{Tz})$.

## Sites that lie within the Landmark Viewing Corridor of a Protected Vista

Where a site lies within a Landmark Viewing Corridor, it is necessary to compensate for the Curvature of the Earth which may have a discernible effect over the distances encountered in the Protected Vistas in this SPG.


To address this phenomenon, this SPG requires that a formula be used to calculate the height of the consultation plane within the Landmark Viewing Corridor. This formula, devised by the Ordnance Survey, computes a correction for the Curvature of the Earth and also applies an indicative correction for the smaller counter-effect provided by the Refraction of Light through the atmosphere. NB: this formula always has the effect of lowering the height of the consultation threshold within the Landmark Viewing Corridor relative to the "straight line" method.

494 From Appendix D note the relevant co-ordinates for the Assessment Point and Landmark for the relevant Protected Vista. Next determine the coordinates of a test point P within the development site and the point Q that lies closest to point $P$ on the line $A B$. Using Pythagoras or measurement in a CAD or GIS system, calculate the lengths L1 and L2 that correspond to the distances in plan $A Q(L 1)$ and $A B(L 2)$. NB. All calculations should be carried out in metres.


495 Using the formulae below, calculate an adjusted height at the Assessment Point ( $A^{\prime} z$ ) and the Landmark ( $B^{\prime} z$ ).


496 Adjusted height at Assessment Point:
Adjusted height at Landmark:

$$
A^{\prime} z=A z-0.0673(L 1 / 1000)^{2}
$$

$$
B^{\prime} z=B z-0.0673(L 2 / 1000)^{2}
$$

497 It is now possible to determine the corrected threshold height ( $Q^{\prime}$ 'z) of the consultation plane at point $Q$ using the same method of similar triangles as before:

$$
Q^{\prime} z=A^{\prime} z+L 1 / L 2^{*}\left(B^{\prime} z-A^{\prime} z\right)
$$

498 The corrected threshold height of the consultation plane at the test point within the site ( $P^{\prime} \mathrm{z}$ ) is the same as the calculated threshold height at point Q ( $Q^{\prime} z$ ).



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## Chinese

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## Vietnamese

Nếu bạn muốn có văn bản tài liệu này bằng ngôn ngữ của mình，hãy liên hệ theo số điện thoại hoặc địa chỉ dưới đây．

## Greek



 $\delta \rho о \mu \kappa \alpha ́ ~ \sigma \tau \eta v \pi \alpha \rho \alpha \kappa \alpha ́ \tau \omega ~ \delta เ \varepsilon v ́ \theta v v \sigma \eta$ ．

## Turkish

Bu belgenin kendi dilinizde
hazırlanmış bir nüshasını edinmek için，lütfen aşağıdaki
telefon numarasını arayınız
veya adrese başvurunuz．

## Punjabi


 लिषे यडे＇डे ठम्वडा वरेः

## Hindi

यदि आप इस दस्तावेज की प्रति अपनी भाषा में चाहते हैं，तो कृपया निम्नलिखित नंबर पर फोन करें अथवा नीचे दिये गये पते पर संपर्क करें

## Bengali

আপনি যদি আপনার ভাষায় এই দলিলের প্রতিলিপি （কপি）চান，তা হলে নীচের ফোন্ নম্বরে বা ঠিকানায় অনুগ্রহ করে যোগাভ্যেগ করুন।

## Urdu

اگر آپ إس دستاويز كى نقل إپنى زبان ميى
 پر فون كري یا ديئع گئع پتت پر رابطه كري

## Arabic

$$
\begin{aligned}
& \text { إذا أردت نسخة من هذه الوثيقة بلختك، يرجى } \\
& \text { الاتصال برقم الهاتف أو مر اسلة العنوان } \\
& \text { أدناه }
\end{aligned}
$$

## Gujarati

જો તમને આ દસ્તાવેજની નકલ તમારી ભાષામાં જોઇતી હોય તો，કૃપા કરી આપેલ નંબર ઉપર ફોન કરો અથવા નીચેના સરનામે સંપર્ક સાઘો．


[^0]:    461 The co-ordinates shown in the following table define the location of each Assessment Point at ground level. Photography has been taken from an assumed eye height approximately 1.6 m above this point. Similarly, Protected Vistas are defined from an assumed eye height 1.6 m above the relevant Assessment Point (with the exception of 5A. 2 Greenwich Park).

