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Assessing the impact of tall buildings on the historic environment

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Funded by
Historic England

node

Node is a heritage, urban design, and landscape consultancy with extensive experience in assessing the impact of tall buildings within sensitive environments. All views expressed in this report are those of the authors.

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Cover image: 103 Colmore Row viewed above and to the rear of Birmingham Museum and Art Gallery (Grade II)*

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Introduction and methodology

1. Introduction

Introduction

'Assessing the impacts of tall buildings on the historic environment' is an Historic England commissioned research project.

The overarching aim of the project is to improve understanding of how the impacts of tall buildings on heritage assets and historic areas are visualised, understood, and accounted for within the planning process, drawing conclusions from examples of good and bad practice.

The purpose of this document is to present a summary of the key findings of the research, and provide recommendations to Historic England on how to encourage good practice.

The project's findings will inform an updated second edition of the Historic England Advice Note (HEAN) 4 'Tall Buildings', currently in production by Historic England, following a consultation draft of March 2020.

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St. Martin's (foreground), The Rotunda (middle ground), and BT Tower (background), Birmingham

Project background

(Adapted from the project brief)

A tall building, by virtue of its height, bulk and widespread visibility, can seriously harm the qualities that people value about a place if it is not in the right place and not well designed. There will be some locations where the existing qualities of a place are so distinctive or sensitive that new tall buildings will cause harm regardless of the perceived quality of the design. What might be considered a tall building will vary according to the prevailing character of the local area: a ten-storey building in a mainly two-storey neighbourhood will be thought of as a tall building by those affected, whereas in the centre of a large city where the general building heights are taller, it may not. Similarly, a building in a hill–top location, or on the crest of a ridge of higher ground, may gain prominence and an appearance of height, and jar with the historic grain and character of the place.

Following the creation of the Greater London Authority in 2000, a flurry of, often controversial, towers and public inquiries mean that tall buildings are one of the most significant issues in the planning of the capital. A review of tall building casework in London, taking in 574 proposed towers across 356 schemes between 2004 and 2017 found that in:

- 3% of cases Historic England advised substantial harm
- 4% Historic England raised serious concerns
- 49% Historic England made no comments (deferring to the LPA)
- 18% Historic England were not consulted

The 2021 edition of the New London Architecture study on tall buildings revealed 587 such schemes within the capital's development pipeline. Further analysis suggests that living in tall buildings is becoming increasingly accepted across the country, as a key part of our housing mix.

Historic England believes that tall buildings should make a positive contribution to city life, but with a caveat that, by virtue of their size, massing and widespread visibility, they can significantly impact upon the existing qualities that people value about a place, notably including their potential to alter the setting of heritage assets.

To make informed planning decisions, it is therefore vital that we develop a full and robust understanding of the impacts tall buildings will have on the historic environment. That understanding is founded on accurate evidence and information, including professional environmental and heritage impact assessments, and through modelling and visualisation (e.g. CGIs). The aim of the brief is 'to improve our understanding of how the impacts of tall buildings on the historic environment, as predicted during the planning process, compare with the reality of those buildings post-construction.'

A key aspect of the commission is therefore to document the extent to which predicted impacts are reflected in reality, and understand what steps can be taken to ensure that the outcomes adhere to the initial, pre-build, aspirations as much as possible. For example, have 3D models and accurate visual representations (AVRs), used to illustrate a proposal's impact, provided an accurate representation of a development's outcomes?

One of Historic England's primary concerns is the impact of change on the historic environment, both positive or negative. As such, the organisation has commissioned this project to develop evidence on best practice regarding the predicted impact of tall buildings on the settings of heritage assets and character of the historic environment, how this reflects reality, and learn lessons as to the underlying technical and procedural factors that influence such outcomes.

Scope

Accounting for the breadth of existing research and publications on tall buildings, it is important to clearly define the scope of this project (adjacent). Of note, emphasis is on learning lessons that relate specifically to the historic environment, not broader perceptions of design quality or development practice.

This project **does** seek to:

- Provide critical assessment of established practices of impact assessment and development visualisation.
- Identify key factors influencing good and poor practice in respect of historic environment.
- Distil the research findings into key lessons for the heritage sector and recommendations to Historic England.
- Inform revision of the forthcoming Historic England good practice advice note for tall building development.

This project **does not** seek to:

- Be considered an adopted Historic England strategy or position statement on tall building development and assessment processes.
- Supersede positions as to best practice within the existing, or forthcoming revision of the Historic England advice note.
- Address issues of design and development practice relating to tall buildings beyond heritage impact assessment procedures.

Method

The project has included a wide-reaching study of resources and prevailing practices pertaining to the development of tall buildings.

This includes examination of tall buildings policies in local plans, supplementary planning documents and masterplans that shape the location and design of tall buildings, and tall building planning application impact assessments, taking account of methods applied by both the heritage sector and other key parties engaged in promoting and delivering such schemes.

Detailed analysis of individual case studies has been combined with consultation with a diverse selection of stakeholders engaged with tall building development across the private, public and third sectors. Close collaboration with Historic England experts has guided the research at all stages, delivered through a dedicated project advisory group.

This document includes a summary of key findings for dissemination to Historic England, the organisation's partners, and wider audiences.


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Key lessons

2. Key lessons

Overview

This chapter distils the findings of research undertaken by the project team, and consultation with experienced practitioners and stakeholders, to present ten key lessons across two core themes.

Purpose

The lessons learned are intended to:

- Improve understanding of technical, procedural, and structural issues affecting assessments of impact.
- Support those producing the revised Historic England Advice Note for tall buildings and the historic environment.
- Prompt discussion on means to consolidate existing good practice and address identified issues.

The lessons learned:

The nature, scope and quality of application documentation for tall buildings

1. A lack of consistency exists in the type and scope of documentation provided in support of tall building applications
2. The type and breadth of visualisations should play a dual role: communicating the character of a tall building, and allowing assessment of its potential impacts
3. The balance of artistic and digital representations can lead to misleading outcomes within tall building visualisations
4. Consideration of alternatives and an active approach to evaluation and mitigation should form an integral component of the iterative design process
5. Even with a fully scoped and detailed tall building planning submission, determining its impact remains subjective

The influence of planning legislation, policy and practice on evidence for tall buildings' impacts

6. Planning reforms have had a significant influence on planning authorities' ability to obtain sufficient evidence of the heritage impacts of tall buildings
7. Securing quality evidence is a key step in enabling local planning authorities to meet their duties for heritage assets when determining tall building applications
8. Supplementary planning resources for tall buildings can be valuable tools for securing sufficient and credible evidence for historic environment impacts
9. Environmental Impact Assessment offers useful lessons for how the heritage sector could better inform the development of tall buildings
10. Adequate capacity and resources is a common denominator for planning authorities who regularly succeed in ensuring full and robust impact assessment

St. Philip's Cathedral (foreground) and 103 Colmore Row, Birmingham

The nature, scope and quality of application documentation for tall buildings

A lack of consistency exists in the type and scope of documentation provided in support of tall building applications

Supporting documentation for tall building applications is critical to understanding impacts

There is a huge variety in the type and scope of documentation supporting applications for tall buildings. This leads to inconsistency in understanding and assessment of likely impacts.

Research of multiple schemes has illustrated that, in different geographic contexts, different levels of information are expected to be provided by applicants. Even within local authority areas, different interpretations of the required scope of supporting information is common. In turn, the evidence bases that underpin decision making can vary markedly.

The variety appears to be a product of a number of factors, including: a lack of guidance on tall buildings or inconsistency in its applications; significant variety in local planning authority validation requirements; disparities in access to supporting tools including city-modelling technologies (as exemplified by the 'VU.CITY' case study); and difference in developers' approaches, including allocation of budget to impact assessment, both before and during the application process.

The principal examples of supporting reports considering heritage impacts that are submitted with tall building applications are set out overleaf, together with a brief summary of common benefits and limitations that may influence their efficacy in informing understanding of outcomes for historic environment.

Regardless of which options are pursued, **there appears a common factor underpinning proper and proportionate heritage impact assessment: that the assessment process adequately engages, from the outset, with significance and the contributions made to that significance via setting.** Heritage statements (should) achieve that as standard practice, but good outcomes are also evident within other, holistic methods of appraisal, such as townscape and visual impact assessment, when significance is placed at the forefront.

Local expectations

The project's case studies have highlighted that expectations from local authorities as to the scope of supporting material varies significantly. This can pose challenges to the ability of such authorities to deliver consistent and defensible decision making. Further, where there is a lack of resources as to impacts, an iterative design and development process is often impaired, including, critically, matters as to how schemes can sensitively respond to the historic environment.

Heritage statement *

Overview: Where a planning application seeks permission for a development which would affect a heritage asset, the National Planning Policy Framework (NPPF) stipulates that local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. Historic England's Advice Note 12: Statements of Heritage Significance provides a framework to support this analysis.

Benefits: Enshrined in national policy since the publication of the National Planning Policy Framework. Advocates a consistent approach to ensuring that the significance of heritage assets, and the contributions of setting, is considered as part of the planning application process.

Limitations: Although common practice, assessment of the potential impact of a proposal on the significance of heritage assets is not explicitly required by the NPPF or prevailing legislation, outside of EIA development (see Key Lesson 6).

Townscape visual impact assessment (TVIA) *

Overview: A composite assessment of a site's context, identifying townscape characteristics that define an area and provides a review of visual amenity.

Benefits: An holistic approach that can support the design process through careful analysis of a site and its context, informing developments that are well sited, sensitive to location and contribute positively to the historic environment.

Limitations: Only methodologically acceptable for assessing historic environment impact provided that the approach properly engages with heritage significance and setting.

Guidance for Landscape and Visual Impact Assessment 3 (GLVIA 3, Landscape Institute), is the accepted standard for landscape visual impact assessments. There is no set guidance for TVIA, however, leading to inconsistencies in methodology and outputs. While GLVIA 3 refers to townscape and cultural heritage considerations there is little reference to how this should be adapted in relation to tall buildings, the impact these could have on heritage assets, and how visualisation can help inform mitigation and design review.

Design and access statement

Overview: The Planning and Compulsory Purchase Act (2004) sets out the requirement for applications for both outline and full planning permission to be accompanied by a design and access statement. At a minimum, this should provide an explanation of how a proposed development is a suitable response to the site and its setting, and demonstrate that it can be adequately accessed.

Benefits: Done well, the design and access statement communicates the evolution of the design development process and conveys a holistic narrative for the final scheme, which will include how it has considered and mitigated its impact upon the historic environment, drawing in wider technical guidance from specific discipline areas, including heritage.

Limitations: A lack of specific guidance on how to adapt the design and access process to reflect the nuances of tall building applications, which have very particular thematic design issues (active frontages / how it integrates with the wider streetscene, treatment of fronts/backs). Where the design and access statement is not used to holistically present wider inputs into the design process, this can lead to gaps in understanding.

Tall building statement

Overview: A supporting document addressing the specific aspects of a development relating to building at scale.

Benefits: The key benefit of this approach is specificity to the challenges and opportunities associated with tall buildings. Where requested, tall building statements (that may form part of a wider design and access statement or planning statement) can convey a more holistic narrative around the balancing of a development's impacts and benefits.

Limitations: A lack of clear guidance on when tall building statements are useful or required, or on the scope of their content, has led to a lack of uptake in their production and consistency in their outputs. The approach can also replicate work done elsewhere within the planning application.

** May be submitted as individual chapters within overarching Environmental Impact Assessments, instead than as individual reports.*

Achieving consistency

A more standardised best practice approach would be advantageous. A specific guidance note on how to undertake a holistic supporting statement (such as a tall building, heritage and townscape visual impact assessment which incorporates assessment of significance) would help to standardise the process, and provide clarity to local authorities, heritage specialists and developers as to expectations in different circumstances. Standard matrices to cross references different development scenarios, at different stages, (design development, pre-application, planning application, planning application with EIA), and in different contexts could also be of benefit - helping to determine the types and scope of supporting documentation required to properly inform decisions.

Clarity around expectations leads to positive results

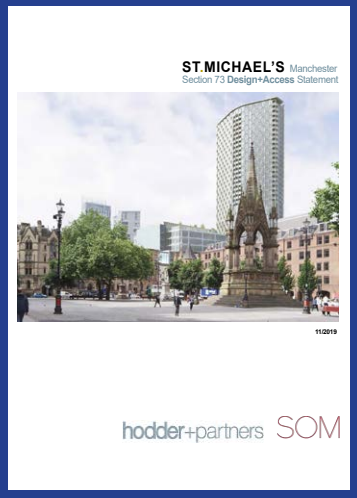
Although detailed, high quality processes do not guarantee good design, they can foster the conditions for this to occur.

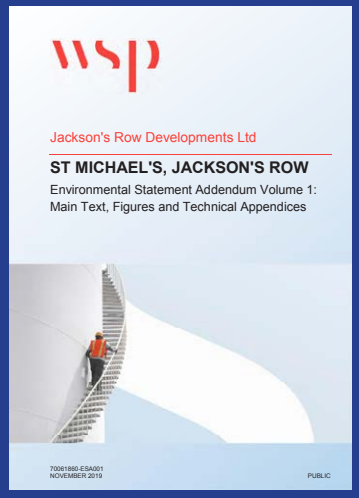
A good example is St Michael's in Manchester, where the approved proposal had been the subject of an extended period of design development and review. A planning application was originally registered in January 2017 for a scheme then known as Jackson Row, proposing the clearance of the site and the development of two towers.

The original design was subject to considerable criticism, including a formal objection from Historic England and local heritage groups, who expressed concern that the scheme would be detrimental to the immediate environment and the wider city skyline, harming the view from Albert Square and resulting in a cumulative impact on a number of nearby highly significant listed buildings, including the Town Hall.

Following feedback, a revised scheme was informed by the approach identified in Historic England Advice Note 4 Tall Buildings and included a tall buildings statement, together with heritage statement and a full environmental statement, including townscape visual impact assessment, which included the consideration of kinetic views through the process of kinetic verified montage.

This use of these resources as part of an iterative design process helped develop a design response which responded sensitively to the historic environment, including the retention of heritage assets within the site within a wider modified development, which includes a single tower with lower rise development. The much adapted scheme was granted permission in 2018.





Top left: visualisation of St Michael's original scheme
Top right: visualisation of St Michael's approved scheme
Bottom lef: Examples of supporting documentation

The type and breadth of visualisations should play a dual role: communicating the character of a tall building, and allowing assessment of its potential impacts

Visualisations, in their many and varied guises, form a central role within tall building applications. They are key in communicating the character of the proposed development; for understanding how it will sit within its context; and in forming an assessment of the likely impact of the proposals in townscape, visual and heritage terms.

Types and usage

The project's case studies illustrate that the methodology for undertaking visuals varies greatly. In their guidance note 'Visual Representation of Development Proposals' (2019), the Landscape Institute identifies four types of technical visualisation (see overleaf). These are described below, with their limitations, and the challenges these pose to the decision making process:

Type 1: Annotated Viewpoint Photograph

Simply indicating the proposed extent of the development within an existing view. The accuracy of this approach can be varied, and with no visual representation of the scheme itself it may leave much to the imagination. Its use as a means of enabling informed decision making is limited.

Type 2: 3D Wireline / Model

A modelled visual representation of the three-dimensional properties of the development, but with limited or no detail of architectural character. This methodology is a means of understanding the volumetric properties of a development (scale, massing), but does not enable a nuanced appreciation of a proposal's aesthetics, nor does it provide an accurate representation of the current situation. Whilst useful for achieving a baseline understanding of impacts, assessment may be reductive where it is the only method pursued.

Type 3: Photomontage / Photowire

This approach seeks to reflect both the appearance of the scheme and the context of the development, overlaid onto an existing photograph, utilising photomontage. If employed correctly and with accuracy, a good understanding of the proposals and their impact can be derived. These images are, however, not scale verifiable. As such, the visuals may not reflect what is ultimately delivered, either in architectural character, or in less accurately modelled cases, in terms of scale and mass.

Type 4: Photomontage / Photowire (survey / scale verifiable) Dynamic Visualisations (AR / VR)

This most detailed of approaches, creating an accurate visual representation (AVR) of the scale, appearance, form and extent of development and how it sits within its context. It requires accurate, verifiable baseline data and a highly technical approach. As a result, it creates the most robust position from which to understand the proposals and determine their impact. Challenges to understanding may still exist in terms of the artistic license of the proposal itself, which is dealt with in greater detail in Key Lesson 3.

Landscape Institute visualisation types

Table 2 Visualisation Types 1-4		Type 1	Type 2	Type 3	Type 4
		Annotated Viewpoint Photograph	**3D Wireline / Model (non-photographic)**	**Photomontage / Photowire**	**Photomontage / Photowire Survey / Scale Verifiable**
Aim of the Visualisation		To represent context and outline or extent of development and of key features	To represent 3D form of development / context	To represent appearance, context, form and extent of development	To represent scale, appearance, context, form, and extent of development
Photographic Equipment	**Tripod**	Recommended but discretionary	Not relevant	Recommended	Necessary
	Panoramic head	Not relevant		Recommended for panoramas	Necessary for panoramas
	Minimum Camera / Lens	Cropped frame or FFS + 50mm	Not relevant	Cropped frame or FFS + 50mm	Full Frame Sensor (FFS) + 50mm FL lens [1]
Locational Accuracy	**Source of camera/viewpoint location data**	GPS, OS Maps, geo-referenced aerial photography	Varies according to technology	Use good quality data: GPS, OS Maps, geo-referenced aerial photography, LiDAR	Use best available data: High resolution commercial data, LiDAR, GNSS, or measured / topographic surveys
	Survey-verified [2]	Not relevant			When appropriate
Data & Presentation	**Verifiable (SNH) [3]**	Not relevant			Required
	3D model	Not required	Required		
	Image Enlargement [4]	Typically 100%	Not relevant	Typically 100%	100% - 150%
	Form of Visualisation	sketch / outline / arrows	massing / wireline / textured	wireline / massing / rendered / textured to agreed AVR level [5]	
	Viewpoint mapping	Dedicated viewpoint location plan			Dedicated viewpoint location plan, + individual inset maps recommended
	Reporting of methodology and data sources	Outline description of sources and methodology recommended		Data, sources and methodology recommended	Verifiable data, sources and methodology required

Source: Extract from 'Visual Representation of Development Proposals' (Landscape Institute, 2019)

The scope of visualisations

The scope of visualisations also varies, including:

- **The extent of the area of potential impact** expected to be understood and assessed through viewpoint analysis. For example a radius from the site, likely to emerge as a result of zone of theoretical visibility (ZTV) assessment.
- **The number of views** to be analysed and visualisations to be undertaken. The number oshould be proportionate to the proposal and the established sensitivity of its surroundings. More visuals provide greater clarity, however unreasonable requests can be financially and operationally prohibitive for applicants. Where LPAs have established key views and viewing corridors, this provides a useful foundation, but the nature of every site is unique and the number of site specific views that are undertaken varies substantively.
- **The selection of viewpoint locations** can significantly change the perceived impact on heritage assets. Subtle changes in position and perspective (e.g. angle) can screen or reveal key elements of a visual experience. Clarity of method for the precise framing of viewpoints is vital.
- **Seasonal representation,** in particular the impact on the winter view, which can often be much starker than filtered summer views where vegetation plays a key role within the view. This allows consideration of the maximum effect scenario.
- **Diurnal representation**, considering the night-time and daytime character and impact of the scheme. This is particularly significant for the heritage sector, as poorly considered lighting can be particularly intrusive within historic environments.
- **Varied weather,** including the aesthetic character of materials and colour palettes in different climactic conditions.
- **Kinetic views** can be a positive means of communicating the changing views of a tall building as a person moves through a space at street level, aiding understanding of relationships between the schemes and associated buildings/spaces along key routes.

Good practice

Good practice in the type and scope of supporting visualisations will vary with the context, but there are common themes:

From the evaluated case studies, successful examples followed a common objective: modelling what it is the *human* eye would see. Those anchored to this principle gave the most holistic and honest pictures of the proposed schemes, including how the scale, mass, material and colour palette (etc.) would be experienced in reality, at eye level, from accessible places, by people.

Ensuring that visualisations present a true and accurate representation of tall buildings is paramount to informed decision making. Most simply, ensuring the actual building height is properly communicated in the presentation of a scheme (e.g. AOD, not number of storeys), enabling third-parties to produce accurate comparative modelling and critical review.

Also consistent for good practice were modelling of a wide variety of viewpoints, and ensuring imagery reflected the true range of English weather conditions, and night-time scenarios to understand impact of the building's proposed lighting design.

Table 1: Relationships between Purpose, User and Visualisation Types

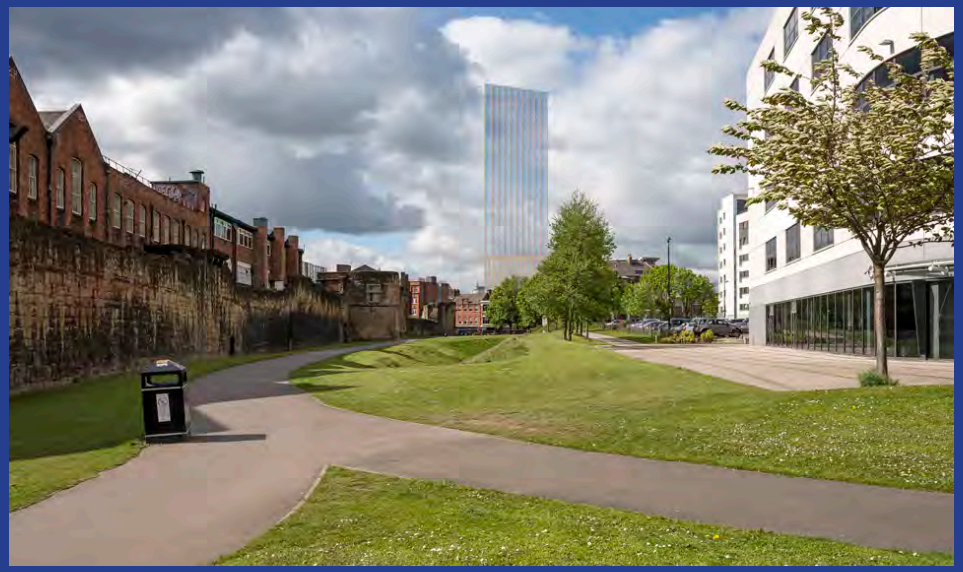
Category	Purpose and Users	Appropriate Visualisation Types
A	Evidence submitted to Public Inquiry, most planning applications accompanied by LVIA (as part of formal EIA), some non-EIA (LVA) development which is contrary to policy or likely to be contentious. Visualisations in public domain.	2 - 4
B	Planning applications for most non-EIA development accompanied by LVA, where there are concerns about landscape and visual effects and effective mitigation is required. Some LVIAs for EIA development. Visualisations in public domain.	1 - 4
C	Planning applications where the character and appearance of the development is a material consideration. LVIA / LVA is not required but supporting statements (such as Planning Statements and Design and Access Statements) describe how the proposal responds to landscape context and policies. Visualisations in public domain.	1 - 3
D	To inform the iterative process of assessment and design with client, and / or pre-application consultations with the competent authority. Visualisations mainly confidential.	1 - 2

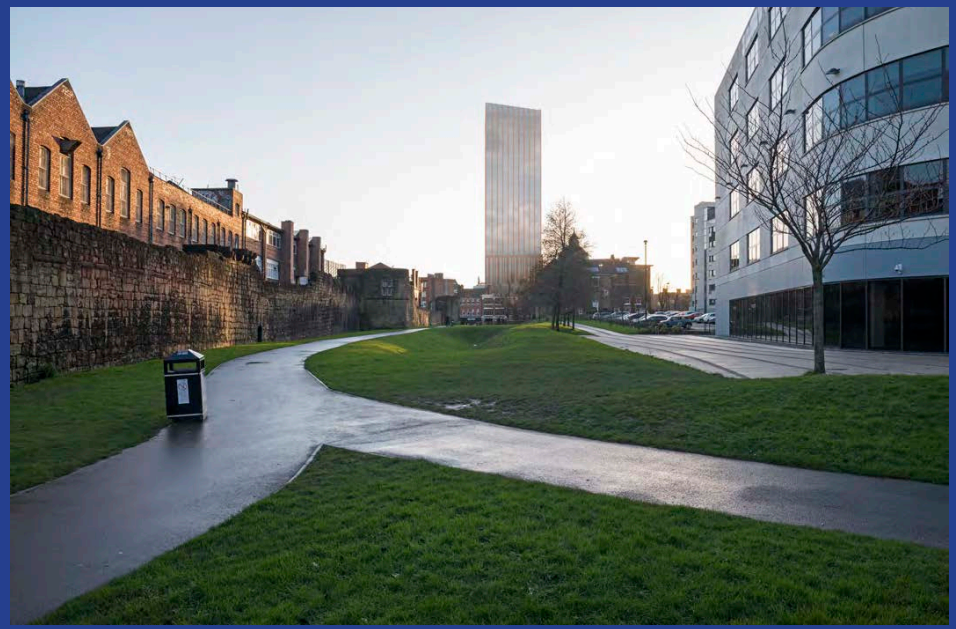
When these elements are addressed, the approach tended to create a sufficiently robust aid for understanding impacts upon the historic environment.

As with documentation as a whole (see Key Lesson 1), a more standardised good practice approach to the identification of suitable visualisations would be advantageous. This could develop the approach identified by the Landscape Institute indicating which visualisation types are appropriate for specific purposes (see adjacent table).

Source: Visual Representation of Development Proposals (LI, 2019)

Example visualisations. Above: Shell Centre, Lambeth; Below: night-time view 103 Colmore Row, Birmingham





Example visualisations. Seasonal variation depicted in summer (above) and winter (below) views at Hadrian's Tower, Newcastle

Cumulative impact assessment

The identification of the potential cumulative impacts of tall buildings is an important aspect of assessing the merits of proposals within a dynamic and evolving city skyline.

Basic good practice in design is to look beyond the 'red line' area, to understand how proposals integrate and complement their context. The need is great in the case of a tall building proposal, with clear potential for an expansive and diverse hinterland. This is particularly important with regard to the historic environment, where the incremental layering of even modest individual changes within the setting of heritage assets often resulting in substantive cumulative change to the experience of their significance.

GLVIA3* provides the accepted guidance with regard to the assessment of cumulative impact, stating it should be undertaken when an environmental impact assessment (EIA) is required.

Specific guidance is not provided, however, on how to determine key variables for cumulative impact assessment. This includes how to determine distances to the development within which to consider other schemes, and matters of visualisation method, presentation and level of detail. Again, approaches have therefore been varied across examined case studies.

In areas of persistent and significant change (e.g. cities), assessment of cumulative effects can require overlaying of multiple proposed visualisations. Most commonly this involves wireframe models of unbuilt schemes with planning consent, to provide a settlement-wide understanding of forthcoming change. A number of challenges exist with this process. The first is the complexity, time and costs associated with acquiring the information necessary to perform this task to a sufficient level of accuracy. As discussed within Key Lesson 8, across local planning authority areas there is significant diversity in the level of three-dimensional information held on their administrative areas, and the availability of this information to applicants. Where this is readily available it can be used to develop proposals coherently and holistically, with knowledge of the current and future context. The VU.CITY is a useful example of how these emerging technologies can guide the development of sensitive proposals.

Whilst centrally collated data on forthcoming schemes is advantageous, where it is not available (or prohibitively expensive) a gulf can exist between the effectiveness of efforts to understand impacts as derived from the development itself, and that which considers its contribution to longer-term processes of change across a wider environment. This is compounded where visualisations are inaccurate or of insufficient quality, creating a misleading impressions of outcomes that is repeated through subsequent landscape/townscape visual impact assessment for other schemes. In short, inadequate visualisation and impact assessment can have negative cumulative effects in themselves.

GLVIA 3 does not specify that an assessment of cumulative impact is required in the case of non EIA development. It leaves that discretion to the local authority and, in turn, guidance varies across the country as to whether, and the extent to which, this is undertaken. Accordingly, a noted number of the non-EIA case studies assessed did not present any assessment of cumulative effects. This gap in understanding may have ramifications for the historic environment. Guidance encouraging such practices in non-EIA contexts would be beneficial, at either local or national level.

Opportunities to embed proposals within a city-wide model with consented schemes would provide clarity, consistency and reduce costs to developers. The modelling of emerging proposals would also assist with considering the impact of proposals that may come forward. This is important where rapid regeneration is occurring within an area, and multiple emerging scenarios need to be modelled.

** Landscape Institute. 2013. Guidelines for Landscape and Visual Impact Assessment Volume 3*

impact

Typically, block infill and wireframe are utilised to represent a proposal's individual contribution to wider processes of cumulative change within an area. This is useful as a tool for presenting scale and location, but ultimately delivers a conceptual overall visual effect rather than presenting the likely composite townscape outcomes. As such, challenges exist in truly understanding the future context of development, and the likely interrelationship of proposed and consented developments. This impacts local authorities' ability to make fully informed and defensible decisions. A better scenario would be through the use of a city wide model, and requirements for the creation of realistic representations of a proposal within its current and future context.

Visual representation of cumulative impact

Left: *block infill of future context at Hadrian's Tower, Newcastle, in conjunction with the proposals in detail.*

Below: *wireline used as a means of contrasting a current and former scheme volume at 103 Colmore Row, Birmingham.*

The balance of artistic and digital representations can lead to misleading outcomes within tall building visualisations

The role of visuals

This study focusses on analysing visualisations in their role as a tool for understanding impact and for informing decision making, but it is important to also recognise that they provide key imagery for how a tall building proposal is communicated to a wide audience. As such, artistic license is, understandably, deployed as a means of 'marketing' the scheme: to local authorities, to consultees and local people and ultimately, to investors and future users. **Their role is a persuasive one and should be viewed with this intention in mind**.

Case studies have highlighted that even where accurate visual representation is adopted, artistic license may be allowed, or even encouraged.

Common are rendering strategies (including lighting choices, filtering effects) that result in visually recessive results, and elements of distraction such as of foreground activity. Each can result in radical differences between visual impression and the final product, even whilst using the same 'raw materials' of form, scale and mass. The appearance of the material palette is a key aspect of the rendering process. Depth, tone, reflection and illumination of materials are all malleable, and can create a more aesthetically pleasing result, or a more integrated (or in some cases, more stand out) piece of architecture than the completed scheme may deliver.

Determining what constitutes a reflection of reality requires an analytical eye. This is a skill that most readily learnt through experience: of viewing visualisations themselves, but moreover, of seeing how this compares with the reality of completed schemes. Expediting the development of such skills amongst Historic England personnel and local authority officers would be beneficial. This could be achieved through bespoke training on how to analyse visuals, with a fundamental component on the presentation of visuals versus the reality of completed schemes. Given the importance and wide-ranging impacts of tall buildings within sensitive and celebrated urban environments, "on the job training" (or learning from one's mistakes) is not the preferred approach.

Reflecting the human experience

Viewpoint perspective is another interesting facet to the production of visualisations. The human experience of tall buildings is typically at street level, channelled along existing streets and through spaces. Away from eye level L/TVIA viewpoint analysis, case studies highlighted that visualisations of schemes are often taken from inaccessible vantages, such as a bird's eye view, allowing for an understanding of the three-dimensional properties of the development (and often an exciting and aspiration image for the proposal), but giving little, or even misleading, information of what the human experience of the development will be. Use of appropriate photographic equipment is also key for assessment, such as 50mm lenses (as per Landscape Institute advice).

Case study - Hadrian's Tower

At Hadrian's Tower in Newcastle, a technically structured and highly detailed LVIA provided assessment of key views, including consideration of diurnal and seasonal variance, together with cumulative impacts. However, the representation of the scheme, whilst detailed, adopted a 'pared back' approach to the depiction of the proposal itself. Whilst it is possible to obtain a sense of the scale and mass of the building from this form of representation, the level of contribution – or indeed, imposition of the building on the view is not possible to appreciate from these visuals alone.

Visualisation of Hadrian's Tower (left) compared with completed scheme (right)

Case study - 103 Colmore Row

At 103 Colmore Row, the TVIA included a well scoped set of visualisations. Birmingham City Council's 'High Places' SPD had been followed with key long range views assessed, together with site-specific short and medium range views, using a combination of wireline and fully rendered views. Assessment of the completed scheme demonstrated that whilst these views are volumetrically accurate, the stylistic devices employed in terms of the position of the sun and behaviour of the material palette, in particular with regard to glazing, creates a result which is quite different to the completed building.

Visualisation of 103 Colmore Row (above), compared with completed scheme (below)

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Consideration of alternatives and an active approach to evaluation and mitigation should form an integral component of the iterative design process from the outset

Considering alternatives

Consideration of alternatives can be a vital tool in securing good design for tall buildings. While mandated by the EIA process, it has proven benefit across all assessment contexts, including non-EIA development.

The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 part 5 states that environmental statements should include *'a description of the reasonable alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment.'* The process provides a framework for sound decision making for historic environment, where awareness of suitable alternatives can lead to markedly different approaches and outcomes.

To be meaningful, site selection for tall buildings needs to be considered early within the life of a project, ideally through site identification in tall building policy or guidance. In reality, however, a site has often been purchased before the consideration of alternatives has been undertaken. Where no alternative sites are considered by an applicant, guidance states that the reason why alternative sites (or site assembly options) were not feasible should be explained. In these cases, post-rationalisation of the location is clearly likely to take place.

Tall buildings policies and guidance in local plans and SPDs and/or accompanying design guidance can provide clarity and help both local authorities and developers ensure tall buildings are appropriately located on sites that have considered potential impacts on townscape, visual and heritage receptors. The development of clusters or locations that add positively to the skyline whilst protecting important views will ensure impacts are restricted and benefits are maximised. Concurrently, the identification of areas where tall buildings are demonstrably not suitable or establishing a cap on tall buildings (as identified in the Reading case study) can be insightful for identifying alternatives, or lack thereof.

Considering alternatives can extend beyond the location and scale of development to include site layouts and access arrangements, approaches to scheme design, and processes and phasing of construction.

London's evolving skyline

Start with the end in mind

Where alternatives are considered as part of an EIA development, heritage, landscape/townscape and visual considerations can help identify opportunities and constraints to support comparative assessments of options, and identify those with least adverse (or indeed most beneficial) effects, and greatest potential for possible mitigation and enhancement.

Active mitigation can be a function of the consideration of alternatives. Mitigation is all too often identified at the culmination of a process as a means of reducing the impact of a proposed development. This poses challenges given the nature of tall buildings, which are generally not able to be mitigated by means employed by smaller scale development, such as through vegetation planting.

Active mitigation has real value in tall building development when applied as part of an iterative process to guide design. This is described as "primary mitigation".

From a time and cost efficiency perspective, developers may, understandably, be reluctant to significantly change designs when a great deal of work has gone into the design of a tall building and viability appraisals have been finalised. The delay and cost associated with significantly reworking these facets can result in developers preferring to post-rationalise and adjust existing proposals, rather than change the design in a substantive manner to address identified issues.

Ensuring that a consideration of alternatives - including the potential for mitigation, is undertaken early in the process as part of a holistic contextual assessment can provide a brief of constraints and opportunities for the initial architectural design which will lead to more successful outcomes and less post-rationalisation of inappropriate design.

Primary mitigation

Typical primary mitigation methods for a tall building include evaluating the mass, scale, height, materials and lighting strategy of a proposal.

Mitigation should consider the siting of towers on a site in relation to screening existing landmarks and heritage assets of significance, together with consideration of how taller elements meet the ground and physically integrate with their context, notably including the treatment of public realm interventions.

If particular viewing corridors, sightlines or vistas are identified as important from a townscape or heritage perspective and these are included within tall building policy and guidance, this will strengthen the opportunity for local authorities and Historic England to protect these corridors, sightlines and vistas.

Where multiple taller elements are proposed, mitigation should also consider the impact on skyline and the relationship between the individual components, to ensure that they are not collectively viewed as an overbearing mass of development, when seen from different angles.

The profile of the top of the building is an important consideration if a slender profile is sought: a common desire for the design of tall buildings and in particular, in the context of mitigating impact. Solutions often involve creating a finial or 'crowning' element to the design which assists in creating a distinctive profile. It is essential that if this approach is adopted, that its design integrates with the holistic vision for the building itself and, moreover, suits its location.

Development economics make slender towers less cost efficient which can play a significant factor in design considerations, particularly in locations where the viability of proposals is marginal.

It should be noted that for buildings of over 50 storeys, economic viability is notably more challenging, with the need for greater consideration of wind loading, lift capacity and construction costs. This can result in high density development being broken down into a collection of towers below this threshold, which can add to the overall mass - and resultant impact of a scheme. Understanding these issues early in the development of a tall building's design through iterative mitigation testing will enable better informed decision making and ultimately result in better design outcomes.

A pivotal decision is whether the development should become a new statement landmark on the skyline or whether the approach to materials, colour and lighting should work to allow the building to become embedded within the wider townscape. Beyond layout, scale and mass, key considerations as part of a mitigation strategy include material choices, colour and proposed lighting of tall buildings. Other priorities for the design of tall buildings may cause some degree of conflict with the priorities of the historic environment. This reinforces the need to address contextual analysis early in the process to ensure that suitable approaches can be found that balance all needs.

Responding to context

Response to context should be bespoke and considered from the very outset of the design development process.

Where historic buildings or landmarks have distinctive colours, contrast may be appropriate to ensure the heritage asset or landmark remains distinctive from new tall buildings. In other locations, a more subtle and recessive approach may offer a more acceptable solution within the wider context of the historic environment compared to stand out, landmark buildings.

A strongly contextual architectural design response was utilised as the primary tool to successfully mitigate potential landscape and visual effects in terms of incongruous scale, colour, tone and massing at the case study of Hadrian's Tower in Newcastle.

103 Colmore Row, Birmingham

The human experience

The human experience of tall buildings is typically at street level, channelled along existing streets and through spaces.

The street level experience can be an under-examined function of taller building proposals, particularly in relation to opportunities for active mitigation of proposals in relation to the historic environment.

Mitigation of impact at ground floor level will consider how built form interacts with the existing streetscene, including methods of physically and visually integrating into the wider built fabric.

Where this is undertaken effectively, new development presents the opportunity to better reveal historic assets at the street level, through sensitive design and enhanced activation of the streetscene.

Critically, it will also address how its public realm can contribute to the life of the city, including the incorporation of hard and soft landscape, which can play a significant role in embedding and integrating tall buildings within their context and providing the principal means of public interaction with the development.

The creation of towers that are set back from the streetscene, within a development layout and form that allows a more appropriate scale to the existing historic environment and the principal areas of public realm may in some cases help to create a more human scale and respond to more sensitive existing contexts.

Little guidance currently exists showing different typologies that may be appropriate in different types of location, which could assist with the integration of tall buildings at street level. Integral to this is the creation of active ground floors and ensuring that taller components do not create an overbearing presence which could impact on the appreciation on important areas of townscape, or create microclimate issues such as overshadowing and down draft/ wind tunnels.

5

Even with a fully scoped and detailed tall building planning submission, determining its impact remains subjective

Beauty is in the eye of the beholder

Even with fully scoped application documentation the use of this information to identify impact on the historic environment is in itself a subjective assessment which allows for different interpretations.

A structured impact assessment is undertaken by the applicant at the culmination of a heritage statement or within a landscape / townscape visual impact assessment, where the proposals are reflected upon in light of the baseline studies of heritage, landscape/townscape and visual aspects. For landscape /townscape visual impact, the effect of schemes is typically assessed by the applicant using the GLVIA3 methodology which has been developed as best practice by the Landscape Institute. This has benefit to the application assessment process through the creation of a consistent approach.

The level of landscape / townscape effect is determined by cross referencing the sensitivity of change against the magnitude of change expected as the result of development. The level of effect is qualified as either beneficial or adverse, and on a scale from major to negligible.

Consideration is given to direct and indirect impacts, duration of impact over the lifecycle of proposed development at construction and post construction, and a judgement is made on whether proposals can be mitigated. An assessment of the significance of visual effect is determined by the assessment of receptor sensitivity, cross referenced against the magnitude of change as a result of development. This produces a resultant level of effect, which can be adverse or beneficial, as set out adjacent.

Level of effect	Townscape and visual criteria
Major adverse	Proposed changes would be sufficient to substantially alter a nationally important view, or view of high scenic quality. Proposed changes would be sufficient to substantially alter an important townscape feature.
Moderate adverse	Proposed changes would be sufficient to moderately detrimentally alter an existing view. Proposed changes would be sufficient to noticeably alter an important townscape feature and be out of scale with the underlying character of the area.
Minor adverse	Proposed changes would be sufficient to have a slight detrimental effect on an existing view. Proposed changes would have a slight detrimental effect on the underlying character of the area and its townscape features.
Negligible	Proposed changes would have an indiscernible effect on views / visual amenity and on character of townscape features.
Minor beneficial	Proposed changes would be sufficient to have a slight beneficial effect on an existing view. Proposed changes would have a slight beneficial effect on the underlying character of the area and its townscape features.
Moderate beneficial	Proposed changes would be sufficient to have a moderate beneficial effect on an existing view. Proposed changes would have a moderate beneficial effect on the underlying character of the area and its townscape features.
Major beneficial	Proposed changes would be sufficient to have a major beneficial effect on an existing view. Proposed changes would have a major beneficial effect on the underlying character of the area and its townscape features.

Reaching a balanced view

In considering the overall landscape/townscape and visual effect, an assessment against townscape and visual receptors is made. In practice, selecting the level of effect, from negligible, minor, moderate to major is a fairly straightforward process, utilising baseline data and the cross referencing methodology set out in GLVIA3. Followed correctly and fully documented, this leads to the creation of defensible and logical approaches to assessment of the level of landscape/townscape visual impact of a scheme.

Deciding whether this impact is adverse or beneficial in townscape and visual terms, however, is a subjective assessment. For instance, does a tall building by its very nature, deliver inherent beneficial effects through visually conveying a successful and evolving city, together with providing a new landmark, which has the potential to create a useful aid to legibility?

Variations on these hypotheses are articulated within numerous examples of supporting tall building statements, design and access statements and townscape visual impact assessments in the tall buildings case studies examined by this research. As part of an applicant's supporting information, these reports will naturally seek to present the best case for development. When this inherent bias is overlaid with flattering artistic impressions of the proposals, this can create a compounding influence that may not fully reflect real world impacts. As such, a key role of the planning authority in making fully informed decision through determining the impact of schemes is to critically analyse the information available, to see beyond the artistry and promotional narrative to pragmatically appraise what is really likely to emerge as a result of the proposals - and consider the resultant impacts. As previously noted, where this skill set is not well developed within local authorities, truly informed decision making may be compromised.

A further challenge lies when landscape/townscape and visual assessments are undertaken independently of heritage assessments. This is a common feature of the assessed case studies, where specific expert consultants were commissioned to undertake reports relating to their respective discipline areas.

A well constructed heritage statement for tall buildings will address specific matters of heritage harm and enhancement emerging from the scheme in much the same way as an L/TVIA identifies effects. L/TVIA takes a broader view, considering multiple overlapping environmental and experiential matters that influence townscape character and quality. Both approaches can function well for heritage impact assessment, providing the methods applied are firmly anchored on a robust understanding of heritage significance. However, separation of studies can isolate (heritage statements) or dilute (L/TVIAs) the distinct issues emerging for historic environment within the design and decision making process.

It is considered that there are benefits to bringing these two processes together, to craft a more holistic narrative regarding the historic environment, townscape and visual matters. This is both in terms of articulating the nature of the site's existing context and of describing the scheme's effects - allowing the local authority the best opportunity to determine a balanced view in assessing the potential impact of the prospective development. Again, understanding heritage significance should remain the cornerstone of the approach, but a more widely encompassing approach can nestle heritage matters neatly within the 'bigger picture' of tall building design and decision making.

An overview of two of the case studies researched as part of this commission is set out overleaf. This highlights how different types of supporting documentation at application stage provides a variety in evidence base and understanding of likely impact, which contributes to varied results.

Case study – Beckley Point, Plymouth

Beckley Point in Plymouth, the tallest building in Devon, provided a selection of visuals to illustrate the scheme within the design and access statement and provided a tall building report in line with the Plymouth Tall Building Strategy. There is a recognition within the design and access statement that: 'It is worth emphasizing the nature of this landmark building will inevitably become iconic to Plymouth as being the tallest building. The intention therefore was to celebrate the height and its strong presence in Plymouth skyline, rather than shy away.' The tall building report included views identified by Historic England where the site is considered prominent from the Hoe Conservation Area and Civic Square Registered Park and Garden along Armada Way. In spite of this, the document states: 'The site does not fall under any historic context and therefore does not have any impact on conservation areas, historic parks and gardens and listed building.' In short, in the absence of the structured assessment methodology of the TVIA process, the production of the visuals alone was not enough to determine impact in a fully informed manner.

Case study – St Michael's, Manchester

St Michael's is a major city centre regeneration scheme in Manchester on land within the boundary of the Deansgate/Peter Street Conservation Area. A number of grade II listed buildings lie in the immediate setting of the site whilst grade II* and grade I listed buildings lie in the wider context. The approved proposals were the subject of an extended period of design development and review. A planning application was originally registered in January 2017, proposing the clearance of the site and the development of two towers. The design was subject to considerable criticism, including a formal objection from Historic England and local heritage groups, who expressed concern that the scheme would be detrimental to the immediate environment and the wider city skyline. Following feedback, the scheme was fully redesigned to consider its townscape, visual and heritage impact, including the retention of heritage assets within the site, within a wider modified development, which includes a single landmark 171.6m tower together with other lower rise development. A thorough package of supporting information was provided in support of the scheme, including a planning and tall building statement, heritage statement, townscape and visual impact assessment and design and access statement.

London View Management Framework protected viewcone as visualised within the VU.CITY modelling platform

The influence of planning legislation, policy, and practice on evidence for tall buildings' impacts

Planning reforms have had a significant influence on planning authorities' ability to obtain sufficient evidence of heritage impacts of tall buildings

Information requirements & NPPF

The determination of all planning applications relies on the provision of sufficient evidence to ensure decision makers have an accurate understanding of the development's effects. Where development may impact designated heritage assets, that accuracy of understanding may be paramount to achieving a lawful decision (see Key Lesson 7). This research has, however, highlighted common frustrations amongst planning authorities as to their limited abilities to secure information on impacts of adequate scope and credibility.

As specialist local government capacities have declined (see Key Lesson 10), **national planning reforms have shifted the onus to obtain evidence of impacts from the applicants to the planning authorities.** The 2012 publication of the National Planning Policy Framework (NPPF) was a key juncture, the result of concerted efforts to streamline the planning process and supporting documents (e.g. Planning Policy Statements (PPS)). Much policy and content was retained or relocated, but significant controls were also removed, including **a marked reduction in information requirements for development affecting heritage assets**.

PPS5 obliged applicants to submit sufficient information on the significance of affected assets (para. HE6.1) ***and*** the nature, level and extent of impacts upon that significance resulting from the development (para. HE6.2). NPPF mandates only the former (2012 para. 128; 2021 para. 194). Powers for planning authorities to invalidate applications where the extent of impacts could not be adequately understood from submitted information were also removed (PPS5, para. HE6.3). National Planning Practice Guidance (NPPG) still encourages impact assessment, but it is no longer an expectation.

The transfer of obligations to planning authorities, the curtailment of their powers, and reductions of in-house specialisms (see Key Lesson 10) **has coincided with a steady increase in tall building applications**. As a result, industry standards for evidence, impact assessment, and decision making may have been set within a planning framework of insufficient scope and strength. Whilst there are many examples of best practice, the submission of the bare minimum has too often been encountered, and too difficult to overcome. **Addressing such issues will require long term strategies to re-emphasise the value of robust assessment of the impacts** (positive or negative) of development on the historic environment within national policy.

Despite these challenges, there remain several useful controls within the current system that have helped fill the gaps created by the NPPF, to secure sufficient evidence:

The legislative framework of Environmental Impact Assessment (EIA) has provided the solution in some scenarios, granting strong controls to planning authorities to request adequate information (see page 39). These powers only apply, however, when EIA is enacted and/or when heritage experts within planning authorities are aware of their powers therein (see Key Lesson 9).

Historic England's good practice guidance and advice (e.g. GPA3) are also a consistent point of reference for decision making, notably within planning appeals for tall buildings. Whilst these resources are not formally empowered through policy, they appear to be often given a welcome degree of weight at key moments. Such positives can compound when robust local policy and guidance (of greater weight than GPA3) are also in place (see Key Lesson 8).

Local validation checklists, supported by robust local planning policy, can also be of benefit. Providing these are properly enforced, they give early incentive for applicants to engage positively an impact assessment process.

2012 planning reforms

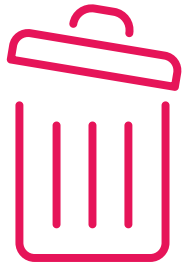
PPS5 — March 2012 → NPPF

HE6.1 Local planning authorities **should require an applicant to provide a description of the significance of the heritage assets affected and the contribution of their setting to that significance.** The level of detail should be proportionate to the importance of the heritage asset and no more than is sufficient to understand the potential impact of the proposal on the significance of the heritage asset. As a minimum the relevant historic environment record should have been consulted and the heritage assets themselves should have been assessed using appropriate expertise where necessary given the application's impact (...)

retained

HE6.2 This information **together with an assessment of the impact of the proposal should be set out in the application** ... as part of the explanation of the design concept (...)

removed



HE6.3 Local planning authorities **should not validate applications where the extent of the impact of the proposal on the significance of any heritage assets affected cannot adequately be understood** from the application and supporting documents.

Information requirements & EIA

Whilst the NPPF has removed explicit requirements for impact assessment on development affecting heritage assets, **legislation regulating Environmental Impact Assessment has established a welcome and robust onus upon applicants to provide sufficient evidence to inform decision making.**

The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (revised 2017) and dedicated PPG section (2014, revised 2020), set clear expectations for sufficient information to be submitted, of suitable scope and professional competency, for planning authorities to adopt opinions on the potential for significant effects to the environment (including historic environment). These controls apply at all stages, including EIA screening. EIA can also form a useful framework for assessment of alternatives.

Despite the likely significant effects of tall buildings, there are, however, considerable inconsistencies in when, and how, EIA is instigated by planning authorities (see Key Lesson 9). Research suggests that where there is greater reluctance for EIA, the quantity and quality of evidence diminishes accordingly. Research also indicates a general low level of awareness of the powers granted by EIA within specialist heritage professionals working within local planning authorities. In turn, opportunities may regularly be missed to use existing tools to ensure the assessment of impacts upon historic environment are sufficiently robust.

The Town and Country Planning (Environmental Impact Assessment) Regulations 2017

Regulation 5: General provisions relating to screening

(5) A relevant planning authority receiving a request for a screening opinion must, **if they consider that they have not been provided with sufficient information to adopt an opinion**, notify in writing the person making the request of the points on which they require additional information.

Regulation 25: Further information and evidence respecting environmental statements

(1) If a relevant planning authority, the Secretary of State or an inspector is dealing with an application or appeal, as the case may be, in relation to which the applicant or appellant has submitted an environmental statement, and **are of the opinion that, in order to satisfy the requirements of regulation 18(2) and (3), it is necessary for the statement to be supplemented with additional information** which is directly relevant to reaching a reasoned conclusion on the likely significant effects of the development described in the application in order to be an environmental statement, the relevant planning authority, Secretary of State or inspector as the case may be must notify the applicant or appellant in writing accordingly, and **the applicant or appellant must provide that additional information**; and such information provided by the applicant or appellant is referred to in these Regulations as 'further information'.

Schedule 4: Information for including in Environmental Statements

5. A description of **the likely significant effects of the development on the environment** resulting from, inter alia:

(d) the risks to human health, **cultural heritage or the environment** (...)

(e) the cumulation of effects with other existing and/or approved projects (...)

The description of the likely significant effects on the factors specified in regulation 4(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development (...)

Securing quality evidence is a key step in enabling local planning authorities to meet their statutory duties for heritage assets when determining tall building applications

Great weight

The need to properly consider the impacts of development upon heritage assets is ingrained within the English planning system.

When determining whether to grant planning permission, local authorities have legal duties to give special regard to the desirability of preserving a listed building or its setting (1). 'Special attention' must be paid to the desirability of preserving or enhancing the character and appearance of conservation areas (2).

For development affecting the setting of listed buildings (a common matter for tall building applications) a brace of court judgements has set a clear mandate for the issue to be given 'considerable importance and weight' (3,4).

The National Planning Policy Framework requires 'great weight' to be given to the conservation of all designated heritage assets when determining planning applications, including where impacts are incurred by virtue of change within their settings (5).

Heritage is far from the only matter at play for tall buildings, however. Significant pressures can weigh on decision makers in support of their approval, including strong political and economic arguments. It is important, therefore, that local authorities establish robust procedures for tall building heritage impact assessment, to ensure their statutory duties are not superseded by external pressures. **Securing a full understanding of developments' potential outcomes will be central to such procedures, as only by ensuring the significance of affected heritage assets are properly understood, and how a proposal would impact that significance, can special regard/attention be truly given.**

Meeting the requirements

A number of authorities have sought to lay the foundations for lawful planning practice in matters of heritage and tall buildings through local planning policy. Most of the local plans examined during this research have addressed matters of the location and design quality of tall buildings. Those which have gone further, embedding requirements for evidence and impact assessment within policy (e.g. Case Studies V & VI), have obtained distinct advantages. This includes (re)placing the onus on applicants (see Key Lesson 6) to provide evidence of impacts, establishing useful catalysts for proactive consultation (e.g. at pre-application) or, conversely, granting powers to officers to counteract difficult or disingenuous conduct. The situation is improved further where supported by dedicated local SPD (see Key Lesson 8). The greater controls gives greater confidence that the information required to enable informed decisions is forthcoming.

Also clear, has been the importance of good practice by planning authorities during the decision making process. Generally where awareness of, and reference to, prevailing good practice frameworks (e.g. GPA3) is evident (e.g. within officer reports to planning committees), this coincides with an apparent appreciation for the need to have had a robust understanding of impacts to heritage significance prior to a final decision being formed.

This has not, unfortunately, been a universal finding. Consultation with industry professionals, and examination of the more contentious recent schemes, have flagged common concerns of assumed, and simplistic outcomes for heritage. Most frequent, that the benefits of a tall building will outweigh any harms. In turn the submission of evidence has not been pursued as an iterative process, and opportunities for design improvement and mitigation are missed.

Supporting the sector

It is important to acknowledge the significant barriers facing planning authorities in understanding the impact of tall buildings (e.g. Key Lessons 6 & 10) and, in turn, the hurdles they must clear to achieve lawful decisions. What can be done to assist them?

The forthcoming revised Historic England advice document for tall buildings will be an important touchstone for planning authorities, and a valuable opportunity to disseminate lessons for best practice. Its publication is the first step, and prioritising of resources to build awareness of the document, and its lessons for best practice, could offer great returns in the long term. Accounting for the still rising demand for tall buildings, the need will be particularly pressing where local plans are due for imminent review.

Targeted training for planning officers and committee members would also be of benefit. It should not be assumed that there is a wide appreciation for the close links between robust evidence for heritage impacts, and lawful planning outcomes. This research suggests there remains work to be done. Historic England's existing, and widely respected, training infrastructure offers a ready made option to build the skills, capacities, and confidence needed in planning authorities to achieve widespread best practice.

Emerging technologies (see Key Lesson 8) could also be of assistance, as means to reduce risks to the historic environment by enabling greater scrutiny of tall buildings by an authority, and more confident decision-making in turn.

References:

1. Planning (Listed Buildings and Conservation Areas) Act 1990; s.66(1)
2. Ibid.; s.72(1)
3. Barnwell Manor Wind Energy Ltd v E.Northants District Council, English Heritage, National Trust & Secretary of State for Communities and Local Government. 2014. EWCA Civ 137
4. The Forge Field Society v Sevenoaks District Council. 2014. EWHC 1895
5. National Planning Policy Framework 2020; p.193

8 Supplementary planning resources for tall buildings can be valuable tools for securing sufficient and credible evidence for historic environment impacts

Local planning authority supplementary planning documents and guidance (SPD/G) have long been useful tools for promoting positive approaches for heritage. SPD/Gs for tall building development are no exception, often providing a valuable steer towards favourable outcomes. Site based frameworks (e.g. masterplans, parameter plans, design codes) can provide similar positives, setting clear expectations at the earliest stages that 'acceptability' is as much a matter of planning and design approach, as it is outcomes.

Whilst this research has identified issues of evidence and impact assessment are not universally considered within SPD/Gs (see overleaf), there are several successful examples which provide useful lessons to promote good practice. These include:

- SPD/G that address process, not just outcomes, can grant local planning authorities more robust tools through which to encourage submission of quality evidence for tall buildings' impacts. Clear criteria as to when information should be submitted, in what format, and, crucially, why that is expected, give clarity for applicants and enable authorities (and other stakeholders) to hold such parties to account for inadequate information, should it be required.
- Forging an explicit link between information requirements within SPD/Gs and local planning policy provides the needed weight to incentivise positive approaches by applicants to impact assessment, and raise the thresholds for evidence above the low bar set by the NPPF (see Key Lesson 6).
- Resources that do advanced groundwork for tall building assessment, such as identifying and describing the heritage significance of key view cones, regularly lay the foundations for good practice in impact assessment by applicants and their agents.
- Framing the heritage agenda within a wider context of positive place making can help justify elevated expectations for information and evidence on tall buildings' impacts. An overtly single-issue approach may achieve the opposite.

Oxford High Buildings 2018 & Cambridge Local Plan 2018

Oxford and Cambridge are amongst England's most significant historic cities. Their sensitivities to tall building development are shared, both being low-rise townscapes enriched with heritage assets and historic areas, and featuring internationally significant skylines.

Both local authorities have crafted supplementary planning documents for tall building development that engage with expected processes for understanding impacts to heritage. Usefully, both resources are firmly embedded within the local planning framework. Oxford's is empowered by dedicated policies of the local plan. Cambridge's goes one further, publishing the document within the plan itself as a dedicated appendix. Such arrangements may go some way to overcoming the deficiencies of national policy for evidence and information requirements, and time will tell as to the effectiveness of their enforcement.

The case studies also illustrate the value of dedicated, local frameworks for evidence and impact assessment. In both cities what constitutes a tall building, relative to the prevailing townscape character, is far lower than the national standard. Further, the nature of the areas' historic environments - resplendent with architectural landmarks - places ever greater concern on issues such as prominence, distraction, or obstruction. The SPD/G provide the needed justification for greater scrutiny, at lower height thresholds, and at earlier stages.

For more information see: Case studies V & VI

Proportion of examined tall building and views management SPDs that directly address issues of ...:

Appropriate location | Detailed design | Impact to heritage assets | Views of local significance | Assessment process | Information and evidence

Missed opportunities

Detailed analysis of a cross-section of existing supplementary planning documents guiding tall building development has identified that:

- Almost all directly considered where new tall buildings would be appropriate.
- Most considered issues of detailed design and appearance.
- Most made explicit reference to the needs to ensure heritage assets were appropriately considered, and/or defined specific key views of significance.
- Few provided technical specifications for the scope of impact assessment or mandated submission of additional information or evidence (e.g. AVRs).

The widespread recognition of potential impacts to heritage assets is welcome, and perhaps reflects the broad awareness identified across local planning authorities in respect of their statutory duties (see Key Lesson 7). **Opportunities to bolster authorities' powers to inform and influence the assessment procedures, a fundamental element of determination, appear to have been often missed**, however. The situation is disappointing accounting for the contents of the widely-known London View Management Framework, which sets robust standards for evidence and assessment procedure that are now well established within the city's decision making framework. Accounting for the present shortcomings for information requirement within the NPPF (see Key Lesson 6), **targeting improvements in the scope and structure of local SPDs may be a sensible medium-term priority.**

Insight through innovation: The rise of supplementary planning data

Rapid advances in planning technologies offer great opportunities to address challenges facing planning authorities in tall building assessment.

The cost and usability of 3D modelling has historically been prohibitive in certain contexts. The emergence of user-friendly, and relatively affordable, 3D city modelling software is key. **Once complex processes of visualisation are now within reach for many authorities, enabling more effective baseline analysis of tall building locations, design and impact at early stages.** Moreover, as such tools become more accessible a wider range of stakeholders may scrutinise a tall building's impact, and present evidenced positions. **The change may provide renewed incentive for applicants to proactively identify and address environmental concerns** (such as heritage), potentially of great benefit to addressing identified issues around information requirements and the transparency of submitted evidence (Key Lesson 6).

The large majority of emerging products are proprietary software, licensed by LPAs and applicants from private sector providers (e.g. VU.City, see overleaf). At present, these providers control the scope and focus of content. **Proactive engagement by historic environment organisations would be beneficial to establish new partnerships and encourage heritage-focussed research and development.** This could include wider integration of existing heritage data (e.g. designated heritage assets or historic environment records) and exploring opportunities to integrate established processes of assessment (e.g. GPA3) within new digital frameworks.

3D city modelling is an exciting development, but other recent technological advances for planning (e.g. Google Streetview) suggests need for caution. **Whilst our ability to remotely visit, navigate, and understand places has radically improved in recent years, the credibility of evidence, information, and ultimately decision making has remained steadfastly tied to tried-and-tested techniques of impact assessment.** The subtleties of, for instance, understanding the setting of a heritage asset, cannot be fully replicated digitally, requiring careful analysis by experts, anchored on real-world human experience. Again, partnerships with the technologies' providers will be key, ensuring their products are integrated as invaluable tools within the process, but do not come to supersede essential elements of good practice.

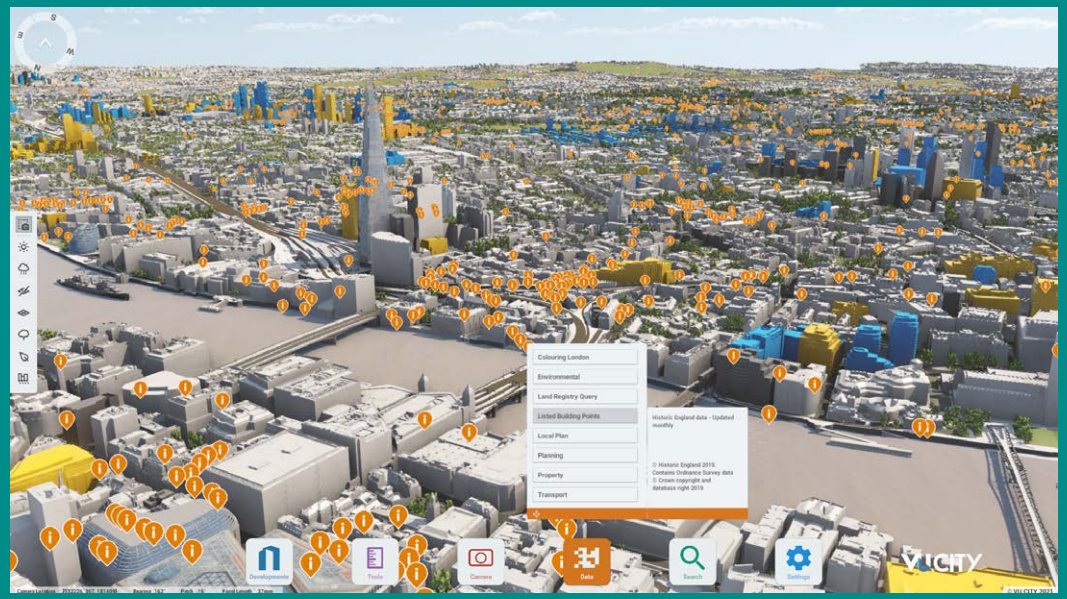
VU.CITY

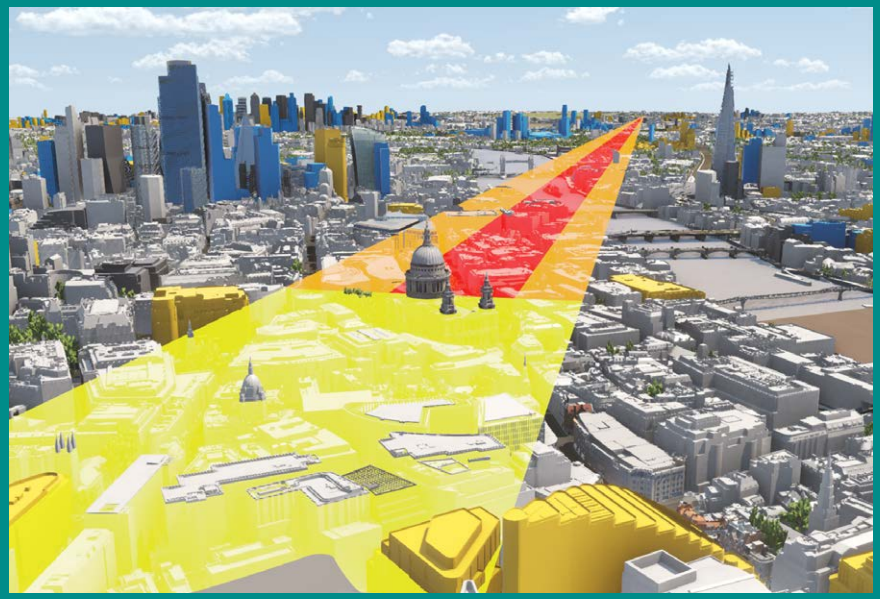
VU.CITY is amongst the better known proprietary software for 3D city modelling for planning. Targeted at both applicants and planning authorities, the software gives capabilities to integrate proposals as they develop, to be scrutinised relative to key planning and design concerns.

For historic environment, the software includes a range of welcomed tools. Integrated data layers include protected vistas of the London Views Management Framework, and designated heritage assets. Moreover, the ability to visualise potential developments from street level, and adapt base parameters (massing, scale) provides the ability to rapidly scope both potential impacts of schemes, via setting, and areas for further, more detailed investigation (e.g. TVIA) or modelling (e.g. AVRs). These can only be positive outcomes, highlighting areas of opportunity or concern at the outset, and significantly reducing risk to both applicant and environment in turn.

At time of authorship, application of VU.CITY appears to be principally within the Greater London area - the website stating 80% adoption by GLA local planning authorities. The company also lists other key stakeholders in tall building development as clients, including Historic England. With the scope of modelled data rapidly expanding across the country's major urban areas, it is likely that other authorities will follow suit in due course, should access to this (or similar) products prove economically viable outside of the (better resourced) London boroughs.

Images overleaf
For more information see: https://vu.city


Colouring London
Environmental
Land Registry Query
Listed Building Points
Local Plan
Planning
Property
Transport
Historic England data - Updated monthly
VUCITY



Environmental Impact Assessment offers useful lessons for how the heritage sector could better inform the development of tall buildings

Lessons for good practice

Cultural heritage is a common component of Environmental Impact Assessments (EIA) yet elements of this method that are of likely benefit to understanding impacts of tall buildings upon the historic environment have not been widely adopted as standard practice by heritage practitioners.

EIA is best delivered as an iterative process, enacted through a cycle of design, assessment, and revision. The standard method of HIA is often more reactive, undertaken when schemes have progressed significantly through the main design stages. This is not considered best practice (with Historic England guidance explicit that early assessment is always preferred), but it has been the unfortunate reality for many of the tall building schemes assessed during this research. On a number of occasions, such an approach has resulted in costly abortive work (e.g. Case Study II).

EIA also encourages applicants to identify, describe and assess the environmental effects of alternative approaches. If adequately evidenced (e.g. through comparative visuals) a better understanding of options can pave the way for better outcomes, often through informed compromise between various stakeholders. Again, this has not yet become common practice for heritage professionals within HIA, but wider application of such exercises could be a welcome evolution in the standard method, particularly in respect of key variables for tall buildings, such as scale.

EIA hesitancy

EIA has proven capacity to highlight heritage impacts at an early stage, providing a legislative mechanism for obtaining sufficient evidence to make informed decisions (see Key Lesson 6). **This research has, however, identified inconsistencies as to if, when and how EIA is instigated by planning authorities for tall building schemes.**

Whilst striking a proportionate balance between the degree of potential impacts and the scope of impact assessment is key to a fair planning process, a widespread hesitancy to properly pursue EIA (or do so at all) may be diminishing opportunities to obtain and consider vital evidence on heritage impacts.

Reasons include perceptions of EIA as too costly, too complex, and a source of unnecessary delays (1).This research also frequently encountered anecdotal evidence, through expert and stakeholder consultation, that EIA has been too readily dismissed without a sound rationale. Of noted concern is a view that EIA identifies unforeseen impacts, and in turn hinders progress of developments of a strategic, commercial and/or political priority to the local area. The issues are therefore overlooked, and opportunities for proportionate and achievable mitigation, including for heritage, may be missed.

Reform

The August 2020 government white paper 'Planning for the Future' indicated significant EIA reforms may be forthcoming. In response, IEMA have set objectives to improve their uptake and effectiveness (2). Several align to this research's recommendations: bolstering capacity and skills in planning authorities; improving awareness of existing, but underused tools; embracing new technologies; improving understanding of the benefits of early and proactive impact assessment; and reviewing industry guidance to improve standards of impact assessment practice.

Proactive collaboration between Historic England and other organisations engaged in impact assessment (IEMA, IHBC, LI etc.) would be to all parties' benefit, to ensure such reforms bring positive outcomes, not the further diminishing of needed controls.

References:

1. IEMA. 2011. 'The State of Environmental Impact Assessment Practice in the UK'
2. IEMA. September 2020. 'Levelling up EIA to Build Back Better'

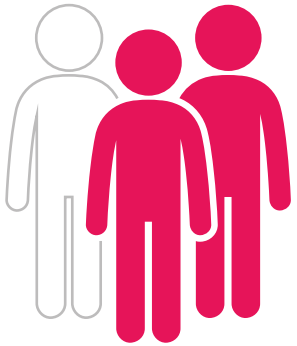
Adequate capacity and resources is a common denominator for planning authorities who regularly succeed in ensuring full and robust impact assessment

Many local planning authorities have experienced a marked reduction of the professional skills and capacities vital to understanding the impact of tall buildings on the historic environment. Where key positions have been retained a notable number have become part-time, or been divided across neighbouring authorities. These changes have coincided with increased demands upon planning authorities to undertake tall building assessments (see Key Lesson 6). Whilst there are exceptions, research suggests the majority of planning authorities have, in turn, been hindered in their ability to deliver on expectations. The time-requirements are prohibitively high, the necessary skills are lacking, and/or procurement of key supporting information (e.g. city modelling) is too costly.

A reliance on applicants' submissions has increased, accordingly. This can bring positive results, but where problems arise the capacity to challenge submitted information, or provide new evidence, is limited. This may result in poorly informed decisions that exacerbate avoidable impacts, and miss opportunities for positive design. The issue will persist without investment in planning authority capacities and/or new cost-effective tools to support them.

Increasing capacities within planning authorities is an important long-term objective, but there are also more immediate solutions:

- Targeted training to increase skills within existing planning authority professionals could be of great benefit to those participating in both the design and planning processes for tall buildings. This is particularly pressing within authorities without dedicated heritage professional provision.
- New support models could be explored, such as embedding experts on heritage and tall buildings within Historic England's regional structure, or that of another independent third-party (such as the emerging national design body). This could provide vital direction at critical junctures, promote new resources (e.g. software, CPD events), and disseminate valuable information (e.g. case law and appeals) as it arises.



48.7% in specialist conservation provision ...

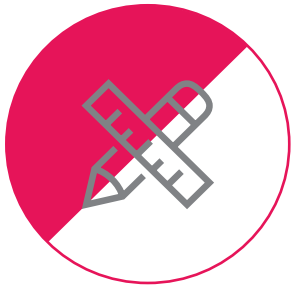
... within local planning authorities since 2009.

Source: *IHBC - 2020 - 'Local Authority Conservation Staffing Resources in England'*

< 50% LPAs have dedicated urban design roles

Of those that do, most have a single officer covering design as part of wider responsibilities, including conservation and landscape. Just 10% of authorities have dedicated design teams.

Source: *Urban Design Group & Place Alliance - 2017 - 'Design Skills in English Local Authorities'*

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3

Recommendations for Historic England

3. Recommendations for Historic England

Recommendation 1:

Historic England **should** be a visible and vocal champion for best practice approaches for tall building assessment. To support this, Historic England **could**:

- Include good practice standards for assessment practice and evidence submission, within a revised tall buildings advice note.
- Broaden discussion of information and evidence requirements during future review of related good practice advice and guidance (e.g. GPA2 and GPA3).
- Produce a topic specific position statement for tall buildings, with linked media campaign, to promote a positive narrative for the heritage sector's potential contributions to high quality, and sensitive development. Consider 'Heritage: The Foundation for Success' as a model (*https://historicengland.org.uk/content/docs/planning/heritage-foundation-for-success*).
- Embed dedicated tall building champions/specialists/liaisons within the organisation's regional structure, who could receive and disseminate targeted training, and support colleagues and local planning authorities engaged in determining tall building applications.

Recommendation 2:

Historic England **should** coordinate with partners to better standardise best practice processes for impact assessment and tall buildings.

To support this, Historic England **could**:

- Engage with the Landscape Institute to examine closer collaboration between landscape and heritage professionals and their assessment methods, including promoting the use of standardised assessment matrices, and ensuring consistency of information requirements across both town/landscape and heritage impact assessment.
- Input into any revision of GLVIA to provide greater emphasis on consideration of townscape, tall buildings and heritage assets within this guidance, and consideration of cumulative impacts within non-EIA schemes.
- Engage IEMA to better align best practice approaches for setting assessment within the EIA framework, and to improve understanding within the heritage sector of the benefits of EIA (both in full, and screening) for securing informed decision making.
- Engage with the RTPI to promote a wide understanding of the requirement for robust, and credible heritage assessment enshrined in planning legislation and policy.
- Engage with RIBA to encourage appropriate visualisation and modelling, including the selection of the type (e.g. wireline vs AVR), position (e.g. aerial vs eye-level), and artistry (e.g. promotional vs realistic) of evidence in ensuring credibility of submissions and decisions.

Recommendation 3:

Historic England **should** invest in a targeted training programmes for tall buildings and the historic environment, with emphasis on best practice approaches for identifying, visualising and balancing potential impacts within the design and planning processes. To support this, Historic England **could**:

- Use the long-standing, and widely respected 'HELM' programme to deliver free (at the point of use) events and webinars.
- Partner with non-heritage professional organisations (RTPI, Landscape Institute, RIBA, IEMA etc.) to ensure wide uptake of training across key stakeholders.
- Target decision makers, including planning officers and committee members, through dedicated marketing and outreach.
- Deliver internal training to Historic England personnel, to better enable best practice advice to be disseminated from national to regional levels.

Recommendation 4:

Historic England **should** encourage investment in local planning authorities' skills and resources to enable effective assessment of tall building's impacts. To support this, Historic England **could**:

- Produce an up-to-date, and detailed appraisal of local planning authority capacities for the core historic environment professions.
- Commission a skills audit of professionals engaged in tall building design. This could include professionals within both the heritage and non-heritage sectors, within both public and private sectors, and across Historic England itself, to enable key deficits to be targeted.
- Promote collaboration across local planning authorities, to better disseminate specialist skills key for tall building assessment across a wider area.

Recommendation 5:

Historic England **should** promote the importance of sufficient evidence and information within statutory and policy frameworks (both national and local) for securing positive outcomes from tall building development. To support this, Historic England **could**:

- Adopt long-term strategies for enhancing provisions within heritage legislative and policy frameworks, building greater emphasis on the value of informed impact assessment at early stages.
- Proactively promote best practice examples of local planning policy and supplementary planning documents for tall buildings when consulted upon during the local plan making process.
- Work to improve awareness across local planning authorities of existing statutory (e.g. EIA legislation) and policy tools.

4

Case studies

node

4. Case studies

Approach

A key element of this involved assessment of nationwide tall building case studies. Case studies have been selected to reflect a variety of development scenarios, contexts, and the multiple variables of tall building development that can gave influence impacts upon the historic environment, including:

- **Location** (e.g. local topographies, and prevailing scale of local buildings)
- **Development scenario** (e.g. residential, mixed-use etc.)
- **Planning context** (e.g. presence or lack of dedicated local tall building guidance; proximity/ concentrations of nearby heritage assets; nature and extent of the setting of nearby heritage assets)
- **Date of design and development** (e.g. changing economic scenarios)
- **Overarching design rationales** (e.g. acknowledged or inadvertent heritage impact)
- **The 'journey' through the planning and development process** (e.g. redesign as a result of planning refusal or value-engineering (etc.))

To ensure a robust evidence base well founded recommendations, these variables were qualified and weighted to ensure that a sufficient cross-section of scenarios has been considered.

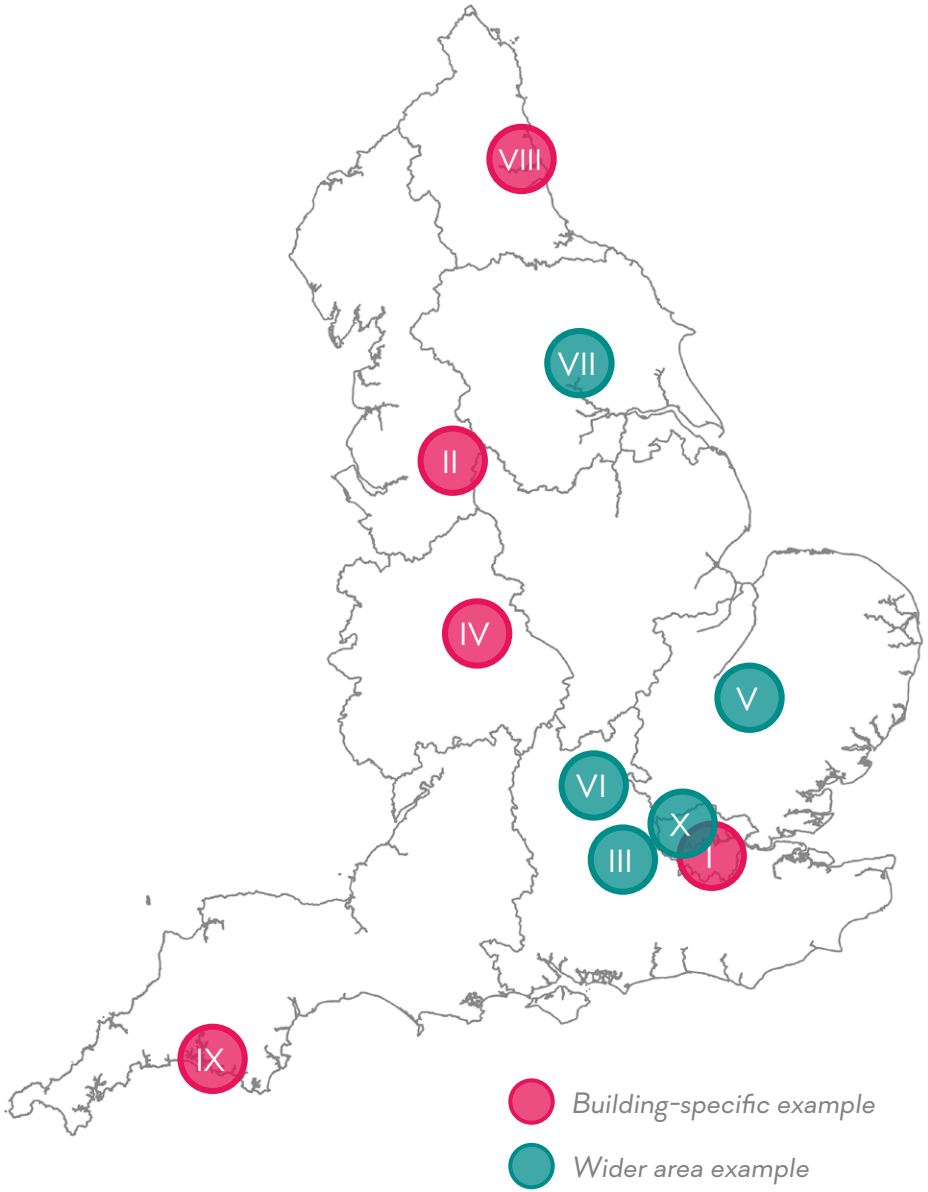
The availability of information (design and access statements, heritage impact assessments, photomontages and CGI renderings etc.) also influenced selection.

Consultation took place across Historic England to maximise the input of specialists across national and regional teams to request and then collate potential case studies into a long list. The long list was categorised using the variables outlined above. In consultation with Historic England.

From the long list of over thirty examples, ten case studies were chosen for detailed presentation within this document, as mapped overleaf.

Detailed case study location plan

Ref	Case Study
I	Southbank Place, Lambeth
II	St Michael's, Manchester
III	Cumulative townscape, Reading
IV	103 Colmore Row, Birmingham
V	Cambridge Local Plan
VI	Oxford High Buildings SPD & Oxford View Cones Study
VII	York Centre Historic Core Conservation Area Appraisal
VIII	Hadrian's Tower, Newcastle
IX	Beckley Point, Plymouth
X	London View Management Framework



Relevant lessons:
1 | 2 | 3 | 4 | 5 | 7 | 8

I. Southbank Place, Lambeth

Summary

Type: building / site

Scale: 5-37 storeys

Status: On site

Overview

Southbank Place relates to the redevelopment of the Shell Centre, Waterloo. It includes part demolition of the locally listed Shell Centre to enable a mixed use development of 8 buildings ranging from 5 to 37 storeys and 4 basement levels accompanying the existing 27 storey Shell Tower.

Local guidance relevant to the assessment of proposals included the Lambeth Tall Buildings Study (2012). Planning and conservation area consent applications and listed building consent applications were originally granted by Lambeth Council in 2013, however the scheme was called in by the Secretary of State for review. Following a successful outcome at public inquiry, planning permission was granted in June 2014. The scheme is close to completion.

Historic environment considerations

The Shell Centre lies within the site of the former Festival of Britain to the south-east of the South Bank Complex. The building occupies a pivotal position on the South Bank in relation to views in an arc from Westminster Bridge to Blackfriars Bridge. Its rich and diverse heritage setting includes:

- The Palace of Westminster, Westminster Abbey and St. Margaret's Church **World Heritage Site.**
- **21 conservation areas** across four London boroughs. The site is within the South Bank Conservation Area.
- A significant number of **listed buildings** including grade I and II*. The site includes the Franta Belsky fountain (listed grade II).
- **Locally listed buildings** including the Shell Centre itself.

Planning application

The proposals comprised four separate applications: main proposals, conservation area consent, external alterations to the retained Shell Centre Tower, and listed building consent for the dismantling, removal and re-siting of the existing grade II listed Franta Belsky fountain. The application was accompanied by an environmental statement including heritage statement and townscape and visual impact assessment which utilised accurate visual representation.

Heritage, townscape and visual impact

Prior to development, the Shell tower was the only tall building on the South Bank in relation to views in an arc from Westminster Bridge to Blackfriars Bridge in what was formerly relatively low rise development close to the river on its southern side. The proposals came under additional scrutiny from Historic England following the submission of the neighbouring Elizabeth House scheme for the creation of a new 12-31 storey building, which collectively with the Shell Centre redevelopment, constituted a major cumulative change to the local area. Elizabeth House was not, however called in for concurrent review meaning that the cumulative effects of proposals were not considered.

The Secretary of State raised the following issues: the extent to which the development is consistent with Government policies in requiring good design and in planning for the conserving and enhancing the historic environment including the impact on the Westminster World Heritage site; and the extent to which the proposals are consistent with the development plan for the area.

The Secretary of State found that the proposed development 'constitutes high quality and therefore good design' and was also satisfied that 'the proposed development, in layout, scale and form, is appropriate in context'. Taking into account views within and from outside the Shell Centre, it was found that the proposals would not harm the setting of any listed building, the settings of the WHS, the St James' Park Registered Park and Garden or any conservation areas: and as such would cause no harm to any heritage asset. The reality of the delivered scheme, especially when considered in light of the cumulative effects of the development of Elizabeth House may, however, tell a different story.

Key points of relevance

- The cumulative impacts of the Shell Centre redevelopment with the neighbouring Elizabeth House were not fully understood at the point of decision making.
- The relative subjectivity of assessment of visuals as a means of determining impact.
- The use of the London View Management Framework as a means of understanding cumulative impact.

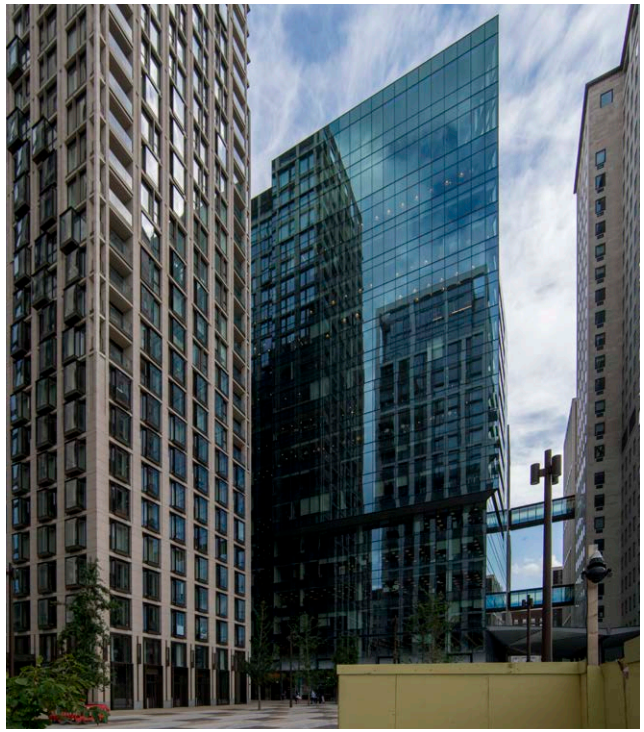
Images:

Above right: photograph of (largely) completed scheme.

Below right: comparison between application visualisation and completed scheme.

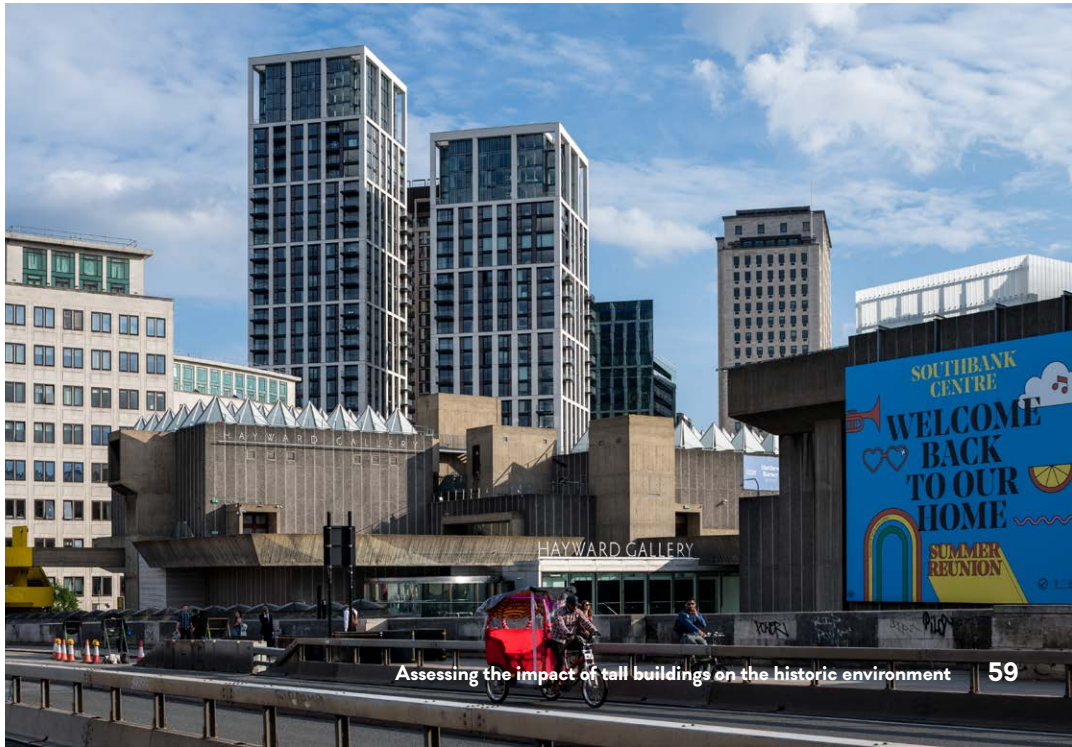
Overleaf: comparison between application visualisations and completed scheme.

Page 59: photographs of (largely) completed scheme.



Shell Centre as modelled

Shell Centre as delivered


SOUTHBANK CENTRE
WELCOME BACK TO OUR HOME
SUMMER REUNION
HAYWARD GALLERY

II. St Michael's, Manchester

Summary

Type: building / site

Scale: up to 39 storeys

Status: Planning approved

Overview

St Michael's is a major city centre regeneration scheme in Manchester on land bounded by Jacksons Row, Bootle Street, Southmill Street & 201 Deansgate Manchester M2 5GU, including a 39 storey tower. The proposals include apartments, office space, leisure space and a five-star hotel in the former Bootle Street police station, which will retain its frontage. The plans include a public square, in front of the refurbished Sir Ralph Abercromby pub and a new synagogue will be built nearby. Local policy relevant to the assessment of proposals included the Tall Buildings Policy (EN2) within the Core Strategy (2012).The scheme was granted planning approval by Manchester City Council on 20 June 2018. The project is due to start on site in 2021.

Historic environment considerations

Heritage considerations relating to the St Michael's development include:

- Located within the boundary of the Deansgate/Peter Street **Conservation Area**.
- A number of grade II **listed buildings** lie in the immediate setting of the site whilst grade II* and grade I listed buildings lie in the wider context.
- The site does not contain any listed buildings, however a number of the **existing buildings were considered to have heritage merit**. This included the former Bootle Street police station and the Sir Ralph Abercrombie pub.

Planning application

The approved proposals were the subject of an extended period of design development and review. A planning application was originally registered in January 2017 for a scheme then known as Jackson Row, proposing the clearance of the site and the development of two towers.

The original design was subject to considerable criticism, including a formal objection from Historic England and local heritage groups, who expressed concern that the scheme would be detrimental to the immediate environment and the wider city skyline, harming the view from Albert Square and resulting in a cumulative impact on highly significant listed buildings, including the Town Hall. Following feedback, the scheme was fully redesigned to consider its townscape, visual and heritage impact, including the retention of heritage assets within the site within a wider modified development, which includes a single tower with lower rise development. The lead architects for the scheme were also changed.

The revised St. Michael's tower is designed in a lozenge shape with a floating canopy at its peak, supported by a three-storey colonnade to residential space below. The new designs include extensive glazing and a bronze façade which were described as seeking to 'bring a lighter, more transparent approach than the original tower design'. A design and access statement, heritage statement, planning and tall buildings statement and townscape visual impact assessment were prepared in support of the planning application to enable holistic articulation of the proposals. A range of economic and social public benefits identified by the scheme include provision of grade A office space, a new synagogue and five-star hotel; diverse job creation; driving tourism; the retention and enhancement of the Sir Ralph Abercromby pub and former police station; and creation of public spaces.

Heritage, townscape and visual impact

The detailed assessments that accompanied the planning application included a townscape visual impact assessment within the environmental statement. This included the consideration of static and kinetic views through the process of kinetic verified montage. The heritage statement identifies less than substantial adverse harm to heritage assets, including the significant change in the skyline, loss of the rear wings of the former police station, loss of views and loss of the established historic scale of the street, but the planning and tall building assessment concludes that the harm caused is outweighed by the public benefits of the proposals. The scheme has not yet been delivered, so the true impacts compared with those identified at planning are yet to be defined.

Key points of relevance

- Heritage, townscape and visual impact assessment as a means of driving design enhancement.
- Visualisations, including kinetic verified montage methodology to understand the evolving character of a scheme along key routes and in relation to heritage assets.
- Production of a supporting tall building statement.

Images:

Below left: visualisation of original scheme comprising two towers.

Below right: visualisation of resubmitted, approved scheme

Overleaf: extracts from townscape visual impact assessment showing approach to baseline and proposed views

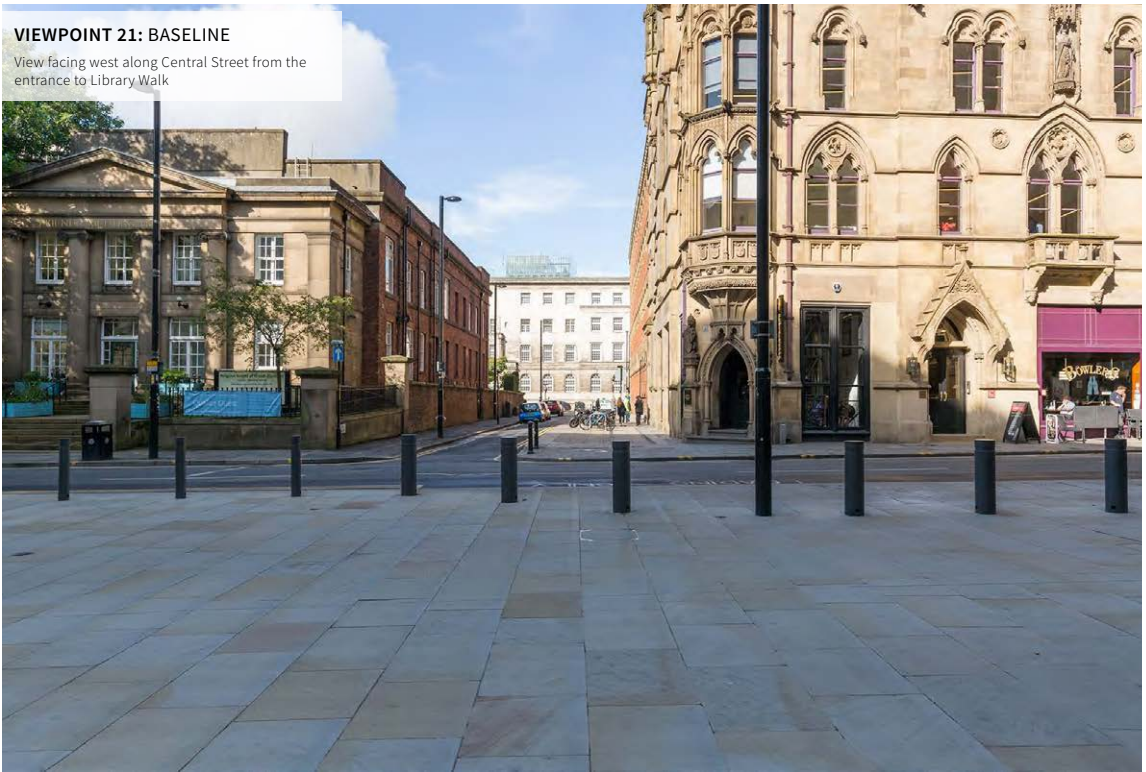
P63: visualisations provided as part of the planning application rovided with

VIEWPOINT 14: BASELINE

View west along Jackson's Row from its junction with Southmill Street

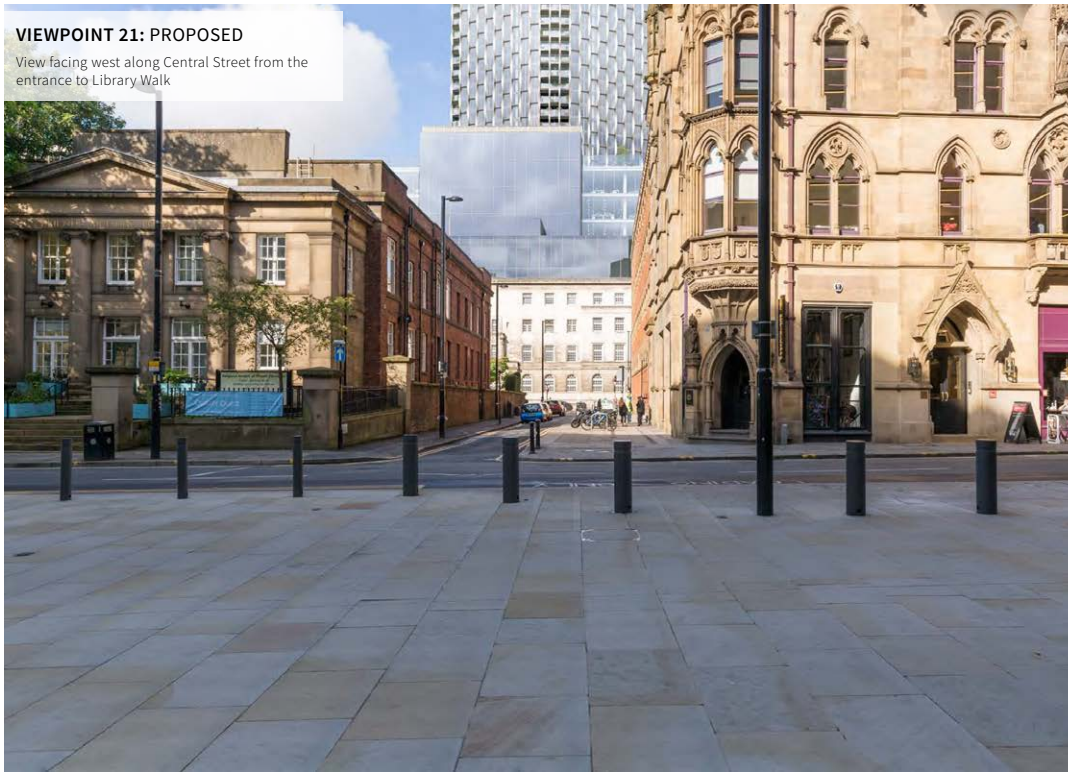
VIEWPOINT 14: PROPOSED

View west along Jackson's Row from its junction with Southmill Street



VIEWPOINT 21: BASELINE

View facing west along Central Street from the entrance to Library Walk



VIEWPOINT 21: PROPOSED

View facing west along Central Street from the entrance to Library Walk


OFFICES
TO
LET
DEANSGATE

Relevant lessons:
1 | 6 | 8 | 10

III. Reading

Summary

Type: townscape

Scale: Multiple buildings, up to 86m

Status: Ranging from completed through to planning approved

Overview

Reading is a large historic market town in Berkshire. It is of relevance to an assessment of the relationship between tall buildings and the historic environment as an example of the cumulative effects of taller buildings within a townscape; that is, a location which is experiencing development pressures pushing 'upwards' in multiple locations across the town, rather than in a single concentrated tall building zone.

Reading is of particular interest as a settlement of relatively modest existing scale (ranked 26th in UK settlement hierarchy by population, 2011 census) when compared with cities experiencing similar levels of expansion, by virtue of its significant local economic growth. The town was identified as having the highest levels of growth of all UK towns and cities in late 2018.

EY's UK Region and City Economic Forecast found that Reading was expected to be one of the UK's fastest growing towns or cities over the three years 2017-2020 (alongside Manchester) in terms of its economic growth, with 2.4% Gross Value Added (GVA) per year. This has contributed towards a property market boom, and a resultant shift skywards to accommodate demand. Recently completed schemes include Verto in 2019 and a cluster of taller buildings, together with a tall building of 19 storeys around Chatham Place, together with new proposals, including the Thames Quarter.

The eight buildings over 43m within Reading (including the Thames Quarter, in progress) are shown overleaf. What is particularly evident when looking at the location of these taller buildings is the breadth of their distribution across the town, with something more of a focus in around Reading Central. This broad distribution has clear implications for the number of heritage assets, viewpoints, town-wide vistas and townscape areas that are likely to be impacted upon by buildings of scale. Simultaneously, the lack of a cluster of taller buildings within a defined zone, limits the potential for buildings to be 'read' collectively, which can result in an increased perception of mass.

Historic environment considerations

Reading's principal heritage considerations include:

- **Conservation areas** spread across the town including Castle Hill/ Russell Street/Oxford Road; St.Mary's Butts/Castle Street; Market Place/London Street; Kendrick Road; and Eldon Square.
- A significant number of **listed buildings** across the town-wide area, including six listed at grade I and 17 at grade II*.
- Reading Abbey **scheduled monument.**
- Forbury Garden grade II **historic park and garden.**

Planning policy

Reading Borough Council's adopted Local Plan (2019) contains a specific policy addressing the design and distribution of tall buildings in the borough: policy CR10 'Tall buildings' (reproduced overleaf), which includes the following:

- Definition of a tall building in the Reading context: 10 storeys of commercial floorspace or 12 storeys of residential (36m tall) or above.
- Definition of three geographically distinct areas of potential for tall buildings. These areas correlate with the location of tall buildings as identified overleaf, however the buildings themselves are scattered broadly across these areas, leading to a lack of focus to scale, which, combined with the close proximity of the clusters themselves, has undermined the objective.
- The identification of where there will no longer be scope for tall buildings - expressing a maximum capacity for scale in specific locations.

Key points of relevance

- The definition of a strong shaping policy at Local Plan level that provides specific advice to applicants on the suitability of sites for tall buildings.
- Demonstrates that adopted policy on tall buildings with particular reference to heritage assets help provide a stronger weight to the protection and enhancement of heritage assets.
- The multi centred approach to tall building zones has created a general scatter of tall buildings distributed across the town, rather than the defined clusters anticipated.

Reading's tallest buildings (over 43m)

1. The Blade: 14 storeys, 86m, 2009

2. Thames Quarter: 23 storeys, 73m, planned 2021

3. Chatham Place Building 3: 19 storeys, 57m, 2016

4. Verto: 18 storeys, 52m, 2019

5. Fountain House: 11 storeys, 49m, 1971

6. Thames Tower: 12 storeys, 47.5m, 1974

7. One Reading Central: 11 storeys, 46m, 2010

8. Novotel Reading: 14 storeys, 43m, 2006

READING BOROUGH LOCAL PLAN (ADOPTED 2019)

POLICY CR10: TALL BUILDINGS

In Reading, tall buildings are defined as 10 storeys of commercial floorspace or 12 storeys of residential (equating to 36 metres tall) or above. Tall buildings will meet all the requirements below.

i) Within Reading Borough, tall buildings will only be appropriate within the 'areas of potential for tall buildings' as defined on the Proposals Map. These areas are as follows:

CR10a: Station Area Cluster

CR10b: Western Grouping

CR10c: Eastern Grouping

Figure 5.2 gives an 'at a glance' diagrammatic indication of the principles for each area set out in the following sections.

ii) CR10a, Station Area Cluster:

A new cluster of tall buildings with the station at its heart will signify the status of the station area as a major mixed-use destination and the main gateway to and most accessible part of Reading.

Tall buildings in this area should:

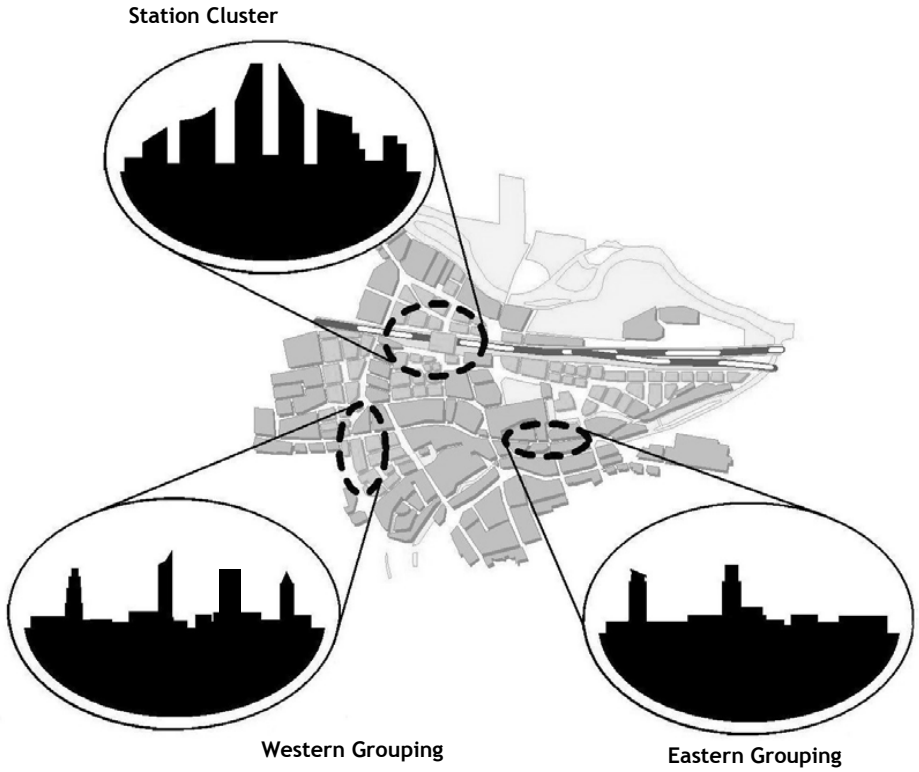
- Follow a pattern of the tallest buildings at the centre of the cluster, close to the station, and step down in height from that point towards the lower buildings at the fringes;
- Contribute to the creation of a coherent, attractive and sustainable cluster of buildings with a high quality of public realm;
- Ensure that adequate space is provided between the buildings to avoid the creation of an overly dense townscape and to allow buildings to be viewed as individual forms;
- Be designed to fit within a wider planning framework or master plan for the area, which allows separate parcels of land to come forward at different times in a co-ordinated manner.

iii) CR10b, Western Grouping:

A secondary cluster of tall buildings would be appropriate to create a distinctive grouping, to mark the area as the civic heart of Reading and a gateway to the centre. Tall buildings in this area should:

- Contribute to the development of a cluster of tall buildings that is clearly subservient to the Station Area Cluster;
- Be generally lower in height than the tallest buildings planned for the Station Area Cluster;
- Be linked to the physical regeneration of a wider area and should not be proposed in isolation;

Figure 5.2: Diagrammatic indicative representation of the differing approach to tall buildings in each area



- Where buildings are to be integrated or front onto existing streets, include upper storeys of the taller structures that are set back from a base which is in line with the general surrounding building heights, particularly where the structure adjoins a conservation area;
- Not intrude on the key view between Greyfriars Church and St Giles Church, and a view from the open space in the Hosier Street development to St Mary's Church.

iv) CR10c, Eastern Grouping:

One or two landmark buildings situated at street corners or other gateway sites are appropriate to mark the extent of the business area.

Tall buildings in this area should:

- Be of a smaller scale than the tallest buildings around the station;
- Be slim in nature and avoid dominant massing;
- Avoid setting back upper storeys on Kings Road in order to align strategic views into and out of the centre;
- Not intrude on the view from Blakes Bridge towards Blakes Cottages.

One tall building has recently been developed (The Blade), and if the permitted tall building at 120 Kings Road is constructed, there will no longer be scope for additional tall buildings in this area.

v) In addition to the area-specific requirements, all tall building proposals should be of excellent design and architectural quality, and should:

- Enhance Reading's skyline, through a distinctive profile and careful design of the upper and middle sections of the building;
- Contribute to a human scale street environment, through paying careful attention to the lower section or base of the building, providing rich architectural detailing and reflecting their surroundings through the definition of any upper storey setback and reinforcing the articulation of the streetscape;
- Contribute to high-quality views from distance, views from middle-distance and local views;
- Take account of the context within which they sit, including the existing urban grain, streetscape and built form and local architectural style;
- Avoid bulky, over-dominant massing;
- Conserve and, where possible, enhance the setting of conservation areas and listed buildings;
- Use high quality materials and finishes;
- Create safe, pleasant and attractive spaces around them, and avoid detrimental impacts on the existing public realm;
- Consider innovative ways of providing green infrastructure, such as green walls, green roofs and roof gardens;
- Locate any car parking or vehicular servicing within or below the development;
- Maximise the levels of energy efficiency in order to offset the generally energy intensive nature of such buildings;
- Mitigate any wind speed or turbulence or overshadowing effects through design and siting;
- Ensure adequate levels of daylight and sunlight are able to reach buildings and spaces within the development;
- Avoid significant negative impacts on existing residential properties and the public realm in terms of outlook, privacy, daylight, sunlight, noise, light glare and night-time lighting;
- Provide managed public access to an upper floor observatory and to ground floors where appropriate, and ensure that arrangements for access within the building are incorporated in the design stage;
- Incorporate appropriate maintenance arrangements at the design stage.

IV. 103 Colmore Row, Birmingham

Summary

Type: building / site

Scale: 26 storeys

Status: On site, nearing completion

Overview

103 Colmore Row is a tall building in Birmingham city centre by developers Sterling Property Ventures Ltd. A planning application for 'Erection of a 26-storey office building with ancillary uses' was approved by Birmingham City Council in September 2016.

The proposals are predominantly office led, with ground floor cafe and winter garden, and a restaurant at level 20. The bold approach to impact and landmark status is summed up by the design and access statement 'We think it is possible for tall buildings to be expressive of the energy and aspirations of modern cities'.The development is currently on site and nearing completion in 2021.

Local guidance relevant to the assessment of proposals included 'High Places: A planning policy framework for tall buildings' (2003).

Historic environment considerations

The site is located at the core of Birmingham's historic Colmore Row area. Heritage considerations include:

- Located within the boundary of Colmore Row and Environs **Conservation Area**.
- A high density of **listed buildings** within the site's context, including grade II listed buildings lie in the immediate vicinity and whilst grade II* and grade I listed buildings lie in the wider context along Colmore Row.
- The site is highly visible from **key areas of historic public realm** at Victoria Square, the civic heart of the city, housing the Town Hall (grI) and Council House, City Museum and Art Gallery (grII*); and St Philip's Square, the churchyard of the Cathedral Church of St Philip (grI).
- The National Westminster Bank building that previously occupied the site had been granted a **certificate of immunity from listing**, requested by the applicant due to the rising interest in postwar commercial buildings and the work of the building's architect, John Madin.

Planning application

The approved proposals were the subject of significant alteration in scale and design from a previous (2008) consented scheme for a taller, 35 storey tower on the site, which was not delivered by the site's former owners.

A planning, design, heritage and access statement and townscape visual impact assessment were prepared in support of the planning application. The new proposals were presented in light of what had previously been deemed acceptable in terms of built scale: considerably lower in height, but with greater massing, following a 'stepped' profile.

Heritage, townscape and visual impact

The scheme is currently on site (2021) and is nearing completion. The full volume of the proposal is legible together with the performance of the material specification under different light conditions.

It is clear from comparative assessment that the visual representations created in support of the townscape visual impact assessment provided an accurate representation of the proposals in volumetric form.

The depiction of materiality is of particular interest. The design is described as follows: 'The crystalline materiality of the building provides a neutral backdrop in mid-distance views within the Conservation Area'.

This statement is supported by the visuals, which convey a sparkling, iridescent quality to all elevations in blue sky, good light conditions. What they do not communicate, however, is the appearance of the building in poor weather - or the experience of the shaded side of the building, where the materials perform quite differently, creating much greater prominence and resulting in the overall impact of the building being far greater than portrayed by the application's visualisations.

Key points of relevance

- Use of visualisations, including the methodologies employed in the artistic presentation of the performance of materials.
- The need for consideration of different scenarios for visualisation where material performance is heavily influenced by light levels, such as glazing - clearly a significant issue for tall buildings at large, given the propensity to utilise glazing as a facing material.

103 Colmore Row as modelled

103 Colmore Row as delivered

V. Cambridge Local Plan 2018

Summary

Type: Local planning authority tall building framework

Status: Adopted

Overview

Cambridge City Council's 2018 Local Plan establishes a robust local framework for the assessment of tall buildings.

Policy 60 is dedicated to 'Tall buildings and the skyline in Cambridge', with a linked Appendix providing (in all but name) a dedicated supplementary planning document.

The framework's stated overall aims are to (in summary):

- Maintain the character and quality of the city's skyline.
- Ensure tall buildings are well considered and appropriate to their context.
- Provide clarity to stakeholders as to the council's positions and expectations.

The framework's stated objectives are to (in summary):

- Provide a definition for 'tall buildings' within Cambridge.
- Set out the baseline situation relative to landscape and townscape character.
- Identify key views and landmark buildings.
- Provide assessment criteria for submitted applications (pg. 338-343), in terms of both quality of the schemes and submitted information, including a dedicated criterion for impacts to the historic environment.

Historic environment context

Cambridge is highly sensitive to tall building development. Whilst the city is of a generally low-rise nature, it is **internationally recognised for its highly distinctive skyline of towers, turrets, chimneys, and spires**.

That skyline is formed by a rich, varied and dense collection of heritage assets, distributed across wide areas of valued historic character. The city's flat topography does limit the numbers of panoramic views within and across these areas, but concurrently limits the ability to nestle large schemes within lower areas.

The potential impact of tall buildings on Cambridge's historic environment has been a long-standing concern for the local planning authority.

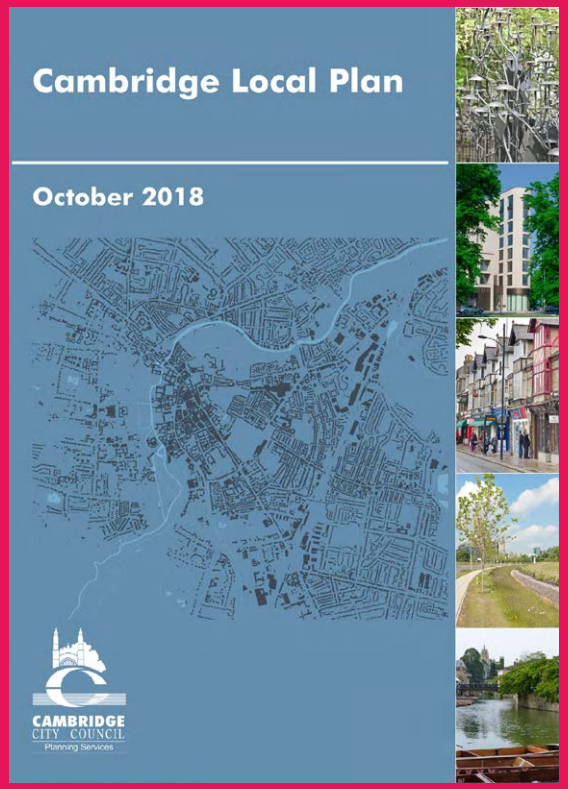
There are LPA planning reports dating back to the 1950s and '60s advocating caution and restraint on the matter, and the issue has been addressed directly in a series of local planning documents, that have culminated in the 2018 plan.

Key points of relevance

The Cambridge framework is multifaceted, addressing issues of site selection, design quality, information requirements, and decision making.

Elements of interest, relative to this project's scope, are outlined below:

- Cambridge is exemplar of 'tall' being a relative term. Here, buildings of over six (and in some cases four) storeys located within and around the city's sensitive historic core are argued by the LPA as requiring elevated scrutiny. The LPA's stance is clearly justified, accounting for the nature of the historic townscape, but at the national scale, such schemes (of concern to Cambridge) would be considered modest, or 'mid-rise' at most. This highlights the risk of setting arbitrary thresholds for what constitutes a tall building (e.g. number of storeys, floor space) and, in turn, where a higher quantum of evidence will be required. As advocated in Cambridge, it is the potential for impact that must be the key variable.
- The case study displays the potential for LPAs to bolster their ability to demand sufficient, credible information through local frameworks. Such frameworks can help re-establish (albeit with lesser weight) the powers lost during the 2012 planning reforms to enforce applicants to submit sufficient, credible evidence to inform decision making. Of note, is the linking of information requirements (e.g. AVRs, photomontages, CGIs) and assessment standards (e.g. LVIA) to the local authority's criterion for determining a scheme's acceptability, giving clear incentive for compliance.



Appendix F: Tall buildings and the Skyline

Criterion b: Impact on the historic environment

F.34 Applicants need to refer to the Cambridge Historic Core Appraisal; the various current conservation area appraisals and suburbs and approaches studies for Cambridge. These documents provide detailed assessments of the parts of the city in respect of history, urban form, character, key buildings and views, among others. Any application that results in potential harm to heritage assets needs to be accompanied by a separate heritage statement or address such issues within the design and access statement, dependent on the scale of the impact.

F.35 In summary, tall building proposals which have the potential to impact on the setting and significance of heritage assets will need to demonstrate and quantify the impact on the heritage asset, be it a listed building, scheduled monument, conservation area, registered historic park and garden and non-designated heritage assets, including but not limited to buildings of local interest.

Policy 60: Tall buildings and the skyline in Cambridge

Any proposal for a structure that breaks the existing skyline and/or is significantly taller than the surrounding built form will be considered against the following criteria:

a. location, setting and context – applicants should demonstrate through visual assessment or appraisal with supporting accurate visual representations, how the proposals fit within the existing landscape and townscape;
b. impact on the historic environment – applicants should demonstrate and quantify the potential harm of proposals to the significance of heritage assets or other sensitive receptors (view of, backdrop and setting), assessed on a site-by-site basis but including impact on key landmarks and viewpoints, as well as from the main streets, bridges and open spaces in the city centre and from the main historic approaches, including road and river, to the historic core. Tall building proposals must ensure that the character or appearance of Cambridge, as a city of spires and towers emerging above the established tree line, remains dominant from relevant viewpoints as set out in Appendix F;
c. scale, massing and architectural quality – applicants should demonstrate through the use of scaled drawings, sections, accurate visual representations and models how the proposals will deliver a high quality addition to the Cambridge skyline and clearly demonstrate that there is no adverse impact;
d. amenity and microclimate – applicants should demonstrate that there is no adverse impact on neighbouring buildings and open spaces in terms of the diversion of wind, overlooking or overshadowing, and that there is adequate sunlight and daylight within and around the proposals; and
e. public realm – applicants should show how the space around tall buildings will be detailed, including how a human scale is created at street level.

Further advice on tall buildings and the skyline and the requirements of the assessment criteria for proposals is set out in Appendix F and further guidance is contained in 'The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Second Edition)' published by Historic England in December 2017 (or its successor document).

Relevant lessons:
1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10

VIa. Oxford High Buildings

Summary

Type: Local planning authority tall building SPD

Status: Adopted

Overview

The Oxford High Buildings Technical Advice Note (TAN) stated aim is to ...'inform decisions regarding the growth and intensification of Oxford in a positive and structured way...' and '...seeks to identify and protect what is important and provide opportunity for positive change and growth.'

The TAN supports local plan policies (particularly DH2), and other local guidance and information (e.g. characterisation, heritage, and local views evidence bases) to provide a framework for the assessment of a site or area's potential to accommodate tall buildings. The TAN is intended to steer planning applications, setting a baseline understanding of Oxford's historic character, defining where tall buildings may be most appropriate, and establishing overarching criteria for consideration of the acceptability of tall buildings by the local planning authority.

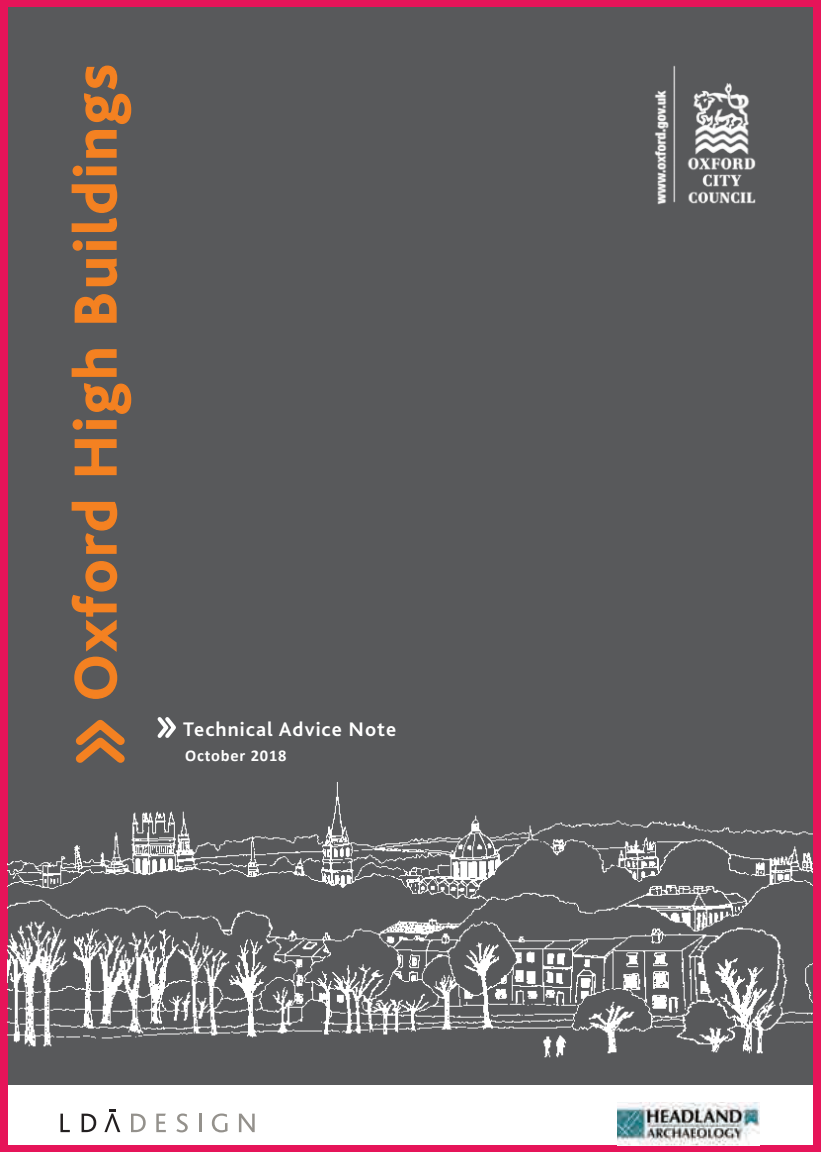
Historic environment context

The TAN states that 'Oxford's location, character and rich architectural legacy have been shaped by centuries of habitation and development related to defence, the growth of academic institutions, industry and commerce.' It emphasises Oxford's relationships to the surrounding landscape, its rich cultural heritage, unique built environment and generally low-rise building heights, and the significance of an iconic skyline characterised by limestone college buildings and towering spires.

Key points of relevance

The Oxford framework is multifaceted, addressing issues of site selection, design quality, information requirements, and decision making. Elements of interest, relative to this project's scope, are outlined below:

- The case study illustrates the benefits of embedding information requirements within planning policy. At a city-wide scale, the TAN recommends provision of sufficient information (AVRs, 3D renders etc.), but within the historic core, where sensitivity to tall buildings is acute, local plan policy DH2 enforces their submission. The approach is proportionate: the greater the risk, the greater the requirement. In turn, the council's expectations on applicants can be framed as reasonable, and fully justified.
- The Oxford approach stands out for its integration of multiple planning and design frameworks influencing tall buildings. The TAN bridges a suite of guidance that are both explicitly (e.g. viewcones) and implicitly (e.g. characterisation studies) of relevance. In doing so, the importance of ample information to inform impact is framed in a wider context, and justification is provided for greater expectations. Given the potential scale and breadth of impacts of a tall building, this is a surprisingly rare approach across local planning authorities' guidance, which too often engage with tall buildings as a singular issue.
- The TAN defines a series of 'visual tests' for tall buildings which may affect key views, areas, and/or heritage assets. These are 'visual obstruction', 'visual competition/ complement', 'skylining', and 'change of character'. Further analysis provides thresholds for when a building of a particular scale would likely result in such an impact relative to specific sensitive receptors. The approach goes beyond simple statements as to the need to consider impacts to the settings of heritage assets (common amongst tall building SPDs and SPGs), moving towards expectations as to how those impacts might manifest. In doing so, the selection, production, and submission of evidence can be better tailored to specific needs.
- The Oxford approach has many benefits for enabling tall building applicants to approach a submission with confidence as to the council's information requirements. There is, however, another side to that dynamic. The laudable clarity as to the criteria for assessment (e.g. the 'Visual Tests'), may also provide a framework for the curation of modelling and visualisation to minimise impressions of such impact. Whilst this is a cynical view, examination of practices for tall building applications suggest it is not unwarranted. The ability for the LPA to challenge submitted information, and/or undertake objective analysis for themselves, is therefore essential. Collaborative access to citywide 3D modelling software would be the ideal scenario, ensuring the power to 'frame' views (and impact) is not a one sided affair.


» Oxford High Buildings
» Technical Advice Note
October 2018
www.oxford.gov.uk
OXFORD CITY COUNCIL
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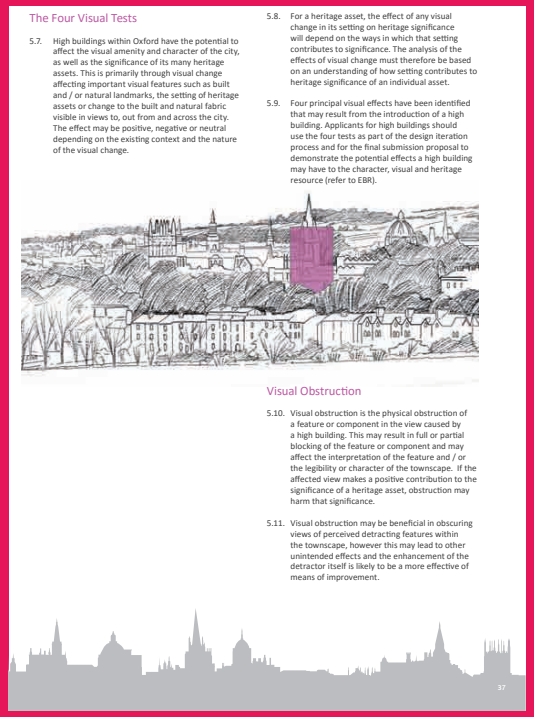
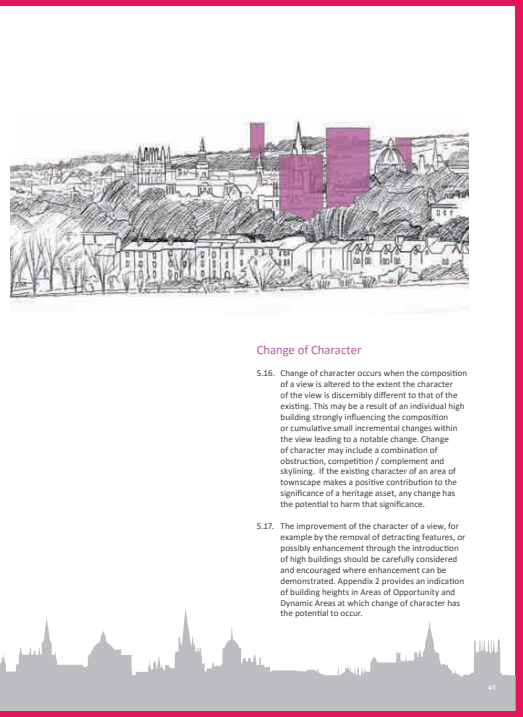
HEADLAND ARCHAEOLOGY


The Four Visual Tests
5.7. High buildings within Oxford have the potential to affect the visual amenity and character of the city, as well as the significance of its many heritage assets. This is primarily through visual change affecting important visual features such as built and / or natural landmarks, the setting of heritage assets or change to the built and natural fabric visible in views to, out from and across the city. The effect may be positive, negative or neutral depending on the existing context and the nature of the visual change.
5.8. For a heritage asset, the effect of any visual change in its setting on heritage significance will depend on the ways in which that setting contributes to significance. The analysis of the effects of visual change must therefore be based on an understanding of how setting contributes to heritage significance of an individual asset.
5.9. Four principal visual effects have been identified that may result from the introduction of a high building. Applicants for high buildings should use the four tests as part of the design iteration process and for the final submission proposal to demonstrate the potential effects a high building may have to the character, visual and heritage resource (refer to EBR).
Visual Obstruction
5.10. Visual obstruction is the physical obstruction of a feature or component in the view caused by a high building. This may result in full or partial blocking of the feature or component and may affect the interpretation of the feature and / or the legibility or character of the townscape. If the affected view makes a positive contribution to the significance of a heritage asset, obstruction may harm that significance.
5.11. Visual obstruction may be beneficial in obscuring views of perceived detracting features within the townscape, however this may lead to other unintended effects and the enhancement of the detractor itself is likely to be a more effective of means of improvement.
37


Change of Character
5.16. Change of character occurs when the composition of a view is altered to the extent the character of the view is discernibly different to that of the existing. This may be a result of an individual high building strongly influencing the composition or cumulative small incremental changes within the view leading to a notable change. Change of character may include a combination of obstruction, competition / complement and skylining. If the existing character of an area of townscape makes a positive contribution to the significance of a heritage asset, any change has the potential to harm that significance.
5.17. The improvement of the character of a view, for example by the removal of detracting features, or possibly enhancement through the introduction of high buildings should be carefully considered and encouraged where enhancement can be demonstrated. Appendix 2 provides an indication of building heights in Areas of Opportunity and Dynamic Areas at which change of character has the potential to occur.
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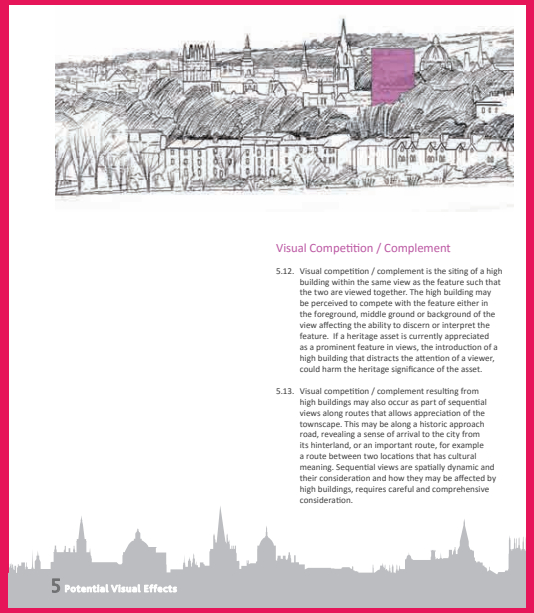
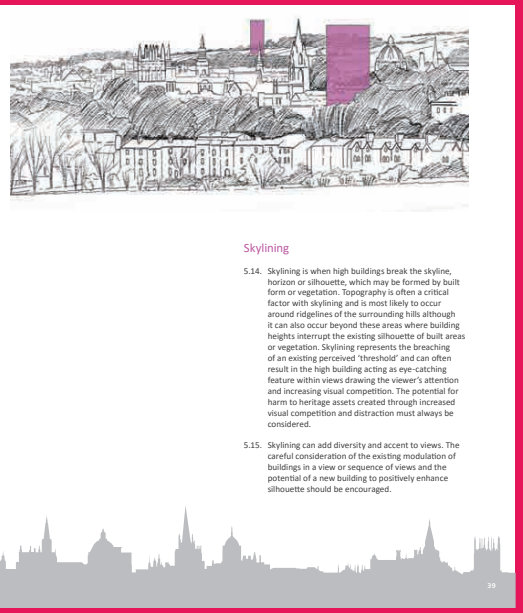

Visual Competition / Complement
5.12. Visual competition / complement is the siting of a high building within the same view as the feature such that the two are viewed together. The high building may be perceived to compete with the feature either in the foreground, middle ground or background of the view affecting the ability to discern or interpret the feature. If a heritage asset is currently appreciated as a prominent feature in views, the introduction of a high building that distracts the attention of a viewer, could harm the heritage significance of the asset.
5.13. Visual competition / complement resulting from high buildings may also occur as part of sequential views along routes that allows appreciation of the townscape. This may be along a historic approach road, revealing a sense of arrival to the city from its hinterland, or an important route, for example a route between two locations that has cultural meaning. Sequential views are spatially dynamic and their consideration and how they may be affected by high buildings, requires careful and comprehensive consideration.
5 Potential Visual Effects


Skylining
5.14. Skylining is when high buildings break the skyline, horizon or silhouette, which may be formed by built form or vegetation. Topography is often a critical factor with skylining and is most likely to occur around ridgelines of the surrounding hills although it can also occur beyond these areas where building heights interrupt the existing silhouette of built areas or vegetation. Skylining represents the breaching of an existing perceived 'threshold' and can often result in the high building acting as eye-catching feature within views drawing the viewer's attention and increasing visual competition. The potential for harm to heritage assets created through increased visual competition and distraction must always be considered.
5.15. Skylining can add diversity and accent to views. The careful consideration of the existing modulation of buildings in a view or sequence of views and the potential of a new building to positively enhance silhouette should be encouraged.
39

Assessment of the Oxford View Cones

2015 Report

OXFORD PRESERVATION TRUST

Historic England

OXFORD PRESERVATION TRUST

2.1.5 The Viewing Place

The viewing place will contribute to what is seen in the view but may also have historical, evidential or communal value as a place for viewing the city that adds to the significance of the view. The park provides 'kinetic' views - that is a series of changing views seen as a person moves around the park, with views changing as a result of different angles, changing elevation in the park and the framing effects of trees. The park is now partly wooded, restricting the area from which views of the city are seen. Where it does provide views to the city, the park preserves a rough grassland character as a foreground with framing by hedgerow trees that reflect the historic character of the views from the city's agricultural hinterland recorded in historic paintings. The Park lies within the Vale of White Horse District and forms part of the Oxford Green Belt, designated to protect the setting and historic character of the city.

Aesthetic value of the foreground	The park provides a green foreground with soft framing of views to the City Centre by trees. This provides an attractive setting to the city that provides a strong contrast with the built up area but does not contain structures that would distract from the view of the colleges and other historic buildings of the City Centre. The park has been managed to provide rich wildlife habitat with birds and insects contributing to its attractive quality.
Historical value of the rural landscape of the hillside	Whilst land to the north west of the park has been developed for housing and land to the south west is expected to be developed shortly, the park preserves an area of open rural character that reflects the history of the hillside as open farmland as portrayed by artists and writers in the past. By preserving this character it maintains its associative value with the past viewers who have used it as an escape from the urban and academic life of Oxford, including the poets and artists who have taken inspiration from the juxtaposition of city and countryside.
Historical association with philanthropists and viewing	The park has a special association with Raymond Ffennell as the philanthropist who gave it to the people of the city for their enjoyment and to preserve the view of Oxford in its green setting.

A photomontage showing the contribution of the rural foreground environment and the fragile narrow area of skyline forming the focus of the view

VIb. Oxford View Cones Study

Summary

Type: Local planning authority views management framework

Status: Adopted

Overview

'Assessment of the Oxford View Cones' (henceforth 'AOVC') is a 2015 report created in partnership by Oxford City Council, Oxford Preservation Trust and Historic England.

The AOVC preceded the Oxford TAN by three years, and the current local plan by five. The identified view cones form a key policy trigger for local plan policy DH2, requiring elevated scrutiny, and greater evidence obligations for tall building development within. The AOVC forms a key evidence base to the TAN.

The AOVC also provides a bespoke methodology for understanding the importance of key heritage views within the city, to better facilitate their preservation, including through development management.

Historic environment context

The 'dreaming spires' of Oxford are an internationally recognised symbol of the city and its renowned University. The experiences of this skyline from within Oxford's countryside setting, looking across to domes, towers, and spires, is of immense value to visitors and residents alike, and has been celebrated through history within artistic and literary representations. These long-renowned experiences are, however, continually challenged by the need to accommodate the city's growth and changing demands. Managing Oxford's historic views has, therefore, been a perpetual concern for local authorities and stakeholders.

Key points of relevance

The AOVC is a fairly innovative document for managing change from development within views of heritage significance.

Elements of particular interest, relative to this project's scope, are as follows:

- The AOVC is exemplar of an authority pursuing best practice process as a means of securing informed outcomes for tall buildings and the historic environment. It goes beyond dictating the receipt of sufficient evidence, establishing a roadmap for how such information can be obtained and presented. This provides clarity to applicants and their agents, but also a standard to which decision makers and other stakeholders can hold such parties to account. The standardised approach may also enable all parties to find cohesion – aligning structure, language and presentation - to enable ease of collaboration and negotiation.
- The AVOC adapts existing practices of landscape and visual impact assessment to create a process that better resonates with the decision making framework for heritage. The AOVC method blends the now well-known five-step process for understanding setting and heritage significance (GPA3), with the vocabulary and practices commonly associated with LVIA. In doing, it provides a more views-specific method than GPA3, and perhaps, in the longer term, a useful alternative to English Heritage's 'Seeing the History in the View' for promoting consideration of heritage matters.
- The AOVC undertakes substantive groundwork of evidence collection to aid applicants in impact assessment. The document includes advanced assessment of the heritage significance and core experiences of the key view cones, providing much of the early phases of the process up front. In doing so, the onus on applicants shifts markedly towards designing schemes that respond to an established historic environment baseline, and evidencing the impacts (or lack of) therein.
- Whilst focussed on a selection of key view cones, the AVOC provides a method that is adaptable across the city to understand the significance of views, and potential impacts therein.

Relevant lessons:
6 | 7 | 9 | 10

VII. York Centre Historic Core Conservation Area Appraisal

Summary

Type: Local planning authority conservation area appraisal

Status: Adopted

Overview

The City of York carried out the York Central Historic Core Conservation Area (YCHCCA) Appraisal in partnership with Historic England and Alan Baxter Associates to provide an in-depth study of the conservation area which defines the unique characteristics that make York so special. Its key functions are to:

- Identify threats to, and opportunities for, the conservation and enhancement of this historic city through unique character statements for 24 individual character areas, together with specific guidance relating to views and building heights.
- Provide practical principles for management and priorities for action through a management strategy for the conservation area, that includes the specific problems and opportunities associated with skyline and views.

Historic environment context

The York Central Historic Core Conservation Area is one of the largest and most complex in England, comprising 24 individual character areas. Through detailed study, the appraisal found the conservation area **'to be a place of outstanding quality and, arguably, of unparalleled richness and variety'**, stating 'No other British city can boast such extraordinary evidence of settlement over 2000 years combined with such a range of outstanding important buildings, structures and streets.'The significant role of the Minster within views of York throughout history is acknowledged.

Given this context, it is clear that York is highly sensitive to tall building development. The YCHCCA identifies that the quantity and quality of views is one of the most important, precious and fragile components of the city's historic townscape - and that the general absence of tall modern buildings is a key factor within this. With this in mind, whilst it is acknowledged that there are few immediate threats to the most important views of York, without adequate measures to safeguard them, inappropriate development in York and its hinterland could erode their quality and character. The document seeks to provide these measures.

Key points of relevance

Elements of interest, relative to this project's scope, are outlined below:

- At a broad level, the document demonstrates the benefit and value of thorough, well produced conservation area appraisals to inform design, including layout, building heights and materials that respond to context.
- The YCHCCA is detailed and clearly structured, addressing site selection, design quality and information requirements, allowing practical use by applicants in developing contextual design and the local authority as a decision making tool.
- Key views and the character and sensitivity of the skyline and roofscape is considered in detail, utilising guidance documents *Seeing the History in the View* and GPA3: *The Setting of Heritage Assets* as a framework to define the significance within each view, together with potential threats. Three concentric zones of views were defined: long distance, city wide and historic core.
- The views analysis demonstrates that settings and views, including important views several miles from the city centre, can be sensitive to tall buildings, requiring much broader analysis than might be otherwise expected, to inform sensitive proposals that prevent harm. This illustrates the importance of having evidence and clear published guidance to help guide development proposals.
- Regarding the development of specific planning policy regarding views, the YCHCCA states that this should not be constrained to safeguarding them from harm, but instead seek to enhance the quality of views through development, through high-quality architecture, together with functions such as tree management, reduction of street clutter and opening up new views of landmarks - or reinstating lost ones, with a particular focus on 'how a new generation of glimpsed and framed views of the Minster, churches, walls and the multitude of charming and beautiful buildings and scenes in the historic core' could be created.
- As such, a key priority for action defined by the YCHCCA was to 'Implement a Views and Building Heights Policy to conserve and enhance key views and the core's fragile roofscape and skyline.' This forms part of a wider 'Placemaking' policy contained within the draft local plan.

York Central Historic Core

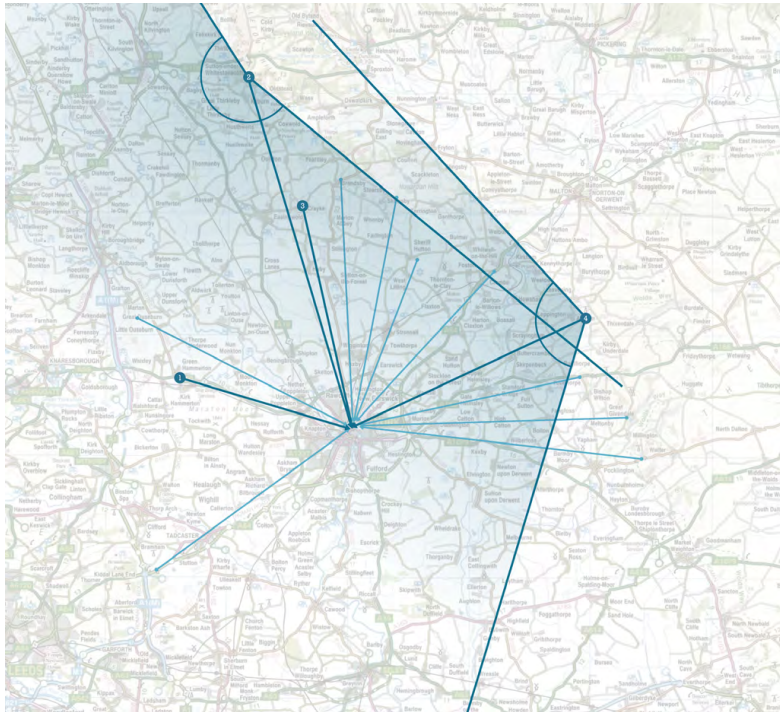
Conservation Area Appraisal

Alan Baxter

Key Views

- Fixed with focal point
- Dynamic
- Dynamic with focal point
- Panorama
- Panorama with focal point
- Dynamic panorama
- Dynamic panorama with focal point
- 17 Key View reference number

Other Views



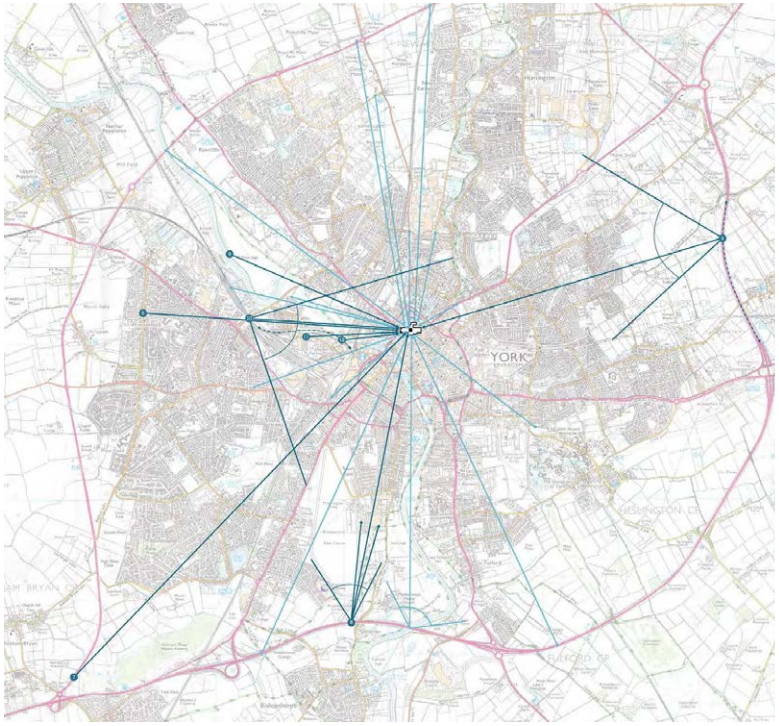
All long distance views

Key Views

- Fixed with focal point
- Dynamic
- Dynamic with focal point
- Panorama
- Panorama with focal point
- Dynamic panorama
- Dynamic panorama with focal point
- 17 Key View reference number

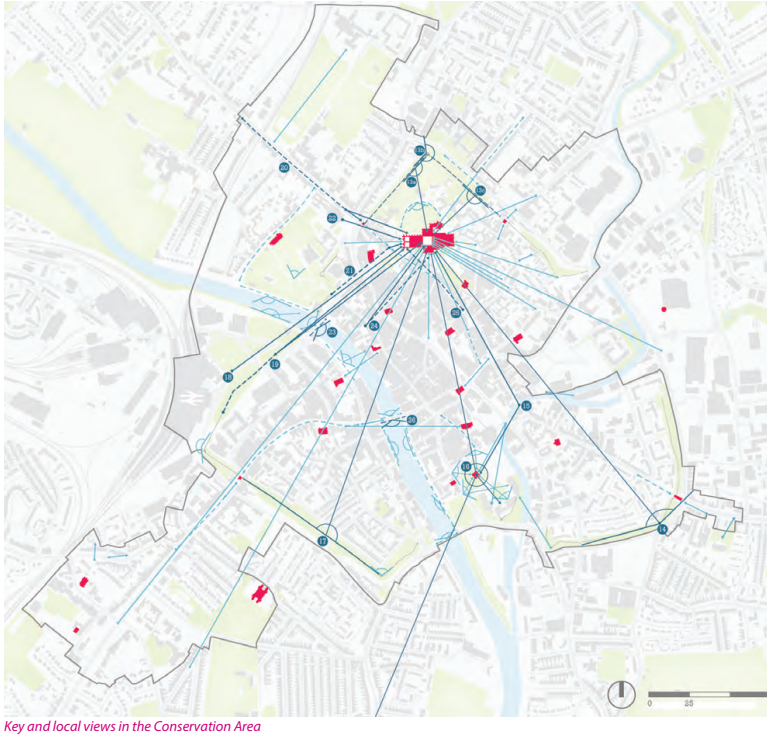
Other Views

- Minster



All city-wide views

Key Views	*Local Views*	
		Fixed with focal point
		Dynamic
		Dynamic with focal point
		Panorama
		Panorama with focal point
		Dynamic panorama
		Dynamic panorama with focal point
17		Key View reference number
		Towers & spires
		Present Conservation Area boundary



Key and local views in the Conservation Area

Relevant lessons:
1 | 2 | 3 | 4

VIII. Hadrian's Tower, Newcastle

Summary

Type: building / site

Scale: 26 storeys

Status: complete (2020)

Overview

Hadrian's Tower is a tall building located at 27 Rutherford Street, Newcastle. Planning permission for Hadrian's Tower, a 26-storey residential building providing 162 apartments with cycle parking, landscaping and highway works was approved in May 2017. The building was designed by Faulkner Browns, built by Tolent Construction and handed over the developer, The High Street Group, in December 2020.

Local guidance relevant to the assessment of proposals included 'Tall Buildings Guidance for Newcastle upon Tyne' (2006).

Historic environment considerations

The site is located at the heart of Newcastle city centre. Heritage considerations include:

- The site is located within the Central **Conservation Area**.
- In the setting of **listed buildings** including Former Cooperative Wholesale Society Printing Works, 172, 174 & 178 Westgate Road and Charlotte Square.
- In the setting of **scheduled monuments** including Newcastle upon Tyne town defences and Blackfriars.
- In the setting of **locally listed buildings** Blenheim House & Sinclair Building, 145-147, Westgate Road and The Bodega Public House.

Planning application

A heritage statement and a landscape/townscape and visual impact assessment were prepared in support of the planning application as part of an environmental statement.

Heritage, townscape and visual impact

The heritage statement identified a low minor level of adverse effect upon heritage assets, however the development's potential to act as an orientation point and landmark denoting a gateway for the transition between the new developments to the north and west and the conservation area to the east were cited as positive features of its design in reference to the historic environment.

The heritage statement also considered the potential effects of the proposal (and cumulative schemes) on a series of identified viewpoints. It concluded that the proposal will have a negligible effect upon the heritage assets in the views, even when cumulative proposals are fully considered.

The L/TVIA identified landscape / townscape effects ranging from negligible – moderate adverse and visual effects and largely beneficial effects on views, such that, on balance the scheme was not considered to cause undue harm to the baseline.

The scheme was completed in December 2020, allowing a comparative assessment of the anticipated impacts and the real world impacts.

It is clear that the accurate visual representations created in support of the L/TVIA provided a volumetrically accurate representation of the proposal. The production of a broad scope of visualisations, including night time views from key locations such as the Sage in Gateshead and a range of seasonal views where landscape features play a key role were also a useful means of conveying important aspects of the development's potential effects.

Cumulative effects were depicted using a simple, 'blocked out' approach to communicate the volume of wider proposals, providing an idea of the prospective quantum of change to the view, if not the associated change to its character as a result.

The approach to the depiction of the proposal itself, through the use of a pared back transparency, reduces the visual prominence of the development within the view, which may have influenced the assessment of potential impacts.

Key points of relevance

- Identification of zone of theoretical visibility and zone of visual influence.
- Use of visualisations, including production of variant options, such as night time and winter views.
- The methodologies employed in the artistic presentation of proposals, notably fading back proposed development.
- The use of blocking out of the volume of wider proposals in assessing cumulative impacts rather than a fully detailed model, providing an idea of the change to character.

Relevant lessons:
1 | 2 | 3 | 4 | 5 | 6 | 8 | 10

IX. Beckley Point, Plymouth

Summary

Type: building / site

Scale: 22 storeys

Status: complete (2017)

Overview

Beckley Point is a student housing development of up to 22 storeys, making it the tallest building in Devon. Planning permission was granted in 2014 for a '22 storey building comprising 507 Student bedrooms, associated facilities and ground floor commercial units'. The building was designed and built by Kier Construction on behalf of The Student Housing Company and completed in 2017. Local guidance relevant to the assessment of proposals included 'Sustainable design in Plymouth' SPD (2009) which includes guidance on tall buildings.

Historic environment considerations

The site is located at a nodal point, at the intended northern gateway to the historic Abercrombie Estate, the scheme undertaken by Abercrombie and Watson to rebuild Plymouth after the devastation of the city during Second World War.

Heritage considerations include:

- The setting of **listed buildings** including Portland Villas to the north and 3,5 and 7 Eton Place to the west.
- **Registered parks and gardens** at Civic Square and The Hoe (both grII) to the south and Ford Park Cemetery (grII*) to the north
- **Scheduled monuments** at The Citadel and Mount Batten
- The Abercrombie Estate as a **non-designated heritage asset**

Planning application

The application was supported by a tall buildings report which forms an appendix to the design and access statement. The report details how consideration has been given to the form and detailing of the building to ensure the development makes a positive impact on Plymouth's skyline.

Heritage, townscape and visual impact

Following consultation and design review at the pre-application stage, a digital model and the creation of long range views were used to help shape the development and consider its impact. The massing of the tower was subsequently significantly amended, with the resultant development adapted to create the appearance of a series of buildings with the intention that the tower would appear more slender and elegant.

Visuals were created to illustrate the scheme within the design and access statement and a tall building report in line with the Plymouth Tall Building Strategy. The tall building report included views identified by Historic England where the site is considered prominent from the Hoe Conservation Area and Civic Square Registered Park and Garden along Armada Way. In spite of this, the document states: 'The site does not fall under any historic context and therefore does not have any impact on conservation areas, historic parks and gardens and listed building.'

There is a recognition within the design and access statement that: 'It is worth emphasizing the nature of this landmark building will inevitably become iconic to Plymouth as being the tallest building. The intention therefore was to celebrate the height and its strong presence in Plymouth skyline, rather than shy away.' The development was not considered by Plymouth City Council to have any undue impact on the setting of any listed buildings or the non-designated heritage asset of Plymouth city centre. No objections to the scheme were raised by (the then) English Heritage.

The scheme was completed in 2017, allowing a comparative assessment of the anticipated impacts and the real world impacts. The visual representations created in support of the tall building report appear to have provided an accurate representation of the proposals in volumetric form, however the visual appearance of the materials, in particular the colour palette is quite different, with the illustrative renders much more subtle and reflective of the palette of the existing townscape, in particular the cohesive townscape of the Abercrombie Estate.

Key points of relevance

- Lack of heritage statement or a landscape / townscape visual impact assessment in support of the application. In the absence of the structured assessment methodology of the TVIA process, the production of the visuals alone was not enough to fully present the likely impact on the historic environment.
- The methodologies employed in the artistic presentation of proposals, notably regarding the appearance of materials varies significantly to the eventual delivery of the development.

Beckley Point as modelled

Beckley Point as delivered

Relevant lessons:
1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10

X. London View Management Framework

Summary

Type: Local planning authority views management framework

Status: Mixed

Overview

London has long been the nation's focal point for tall building development. The Greater London authorities have therefore been the testing grounds for planning of tall buildings that may affect the historic environment. The decisions made, and the processes followed (including impact assessment, modelling and visualisation), have shaped our understanding of best (and worst) practice. As a Greater London Authority resource, the London Views Management Framework (LVMF) has played a significant role.

Historic environment context

London is amongst the most celebrated historic cities in the world. Landmark buildings are central to its identity. Most renowned is St Paul's Cathedral, but the city's many distinct skylines include a vast range of other, prominent heritage assets. The city has changed dramatically over the last fifty years, and continues to evolve at pace. Tall buildings are amongst the key drivers for that change. Their individual and cumulative effects upon the environment are often a principal concern when determining planning applications.

The LVMF is not, explicitly, a heritage management tool, but the emphasis of many identified views is upon a selection of the city's most significant historic landmarks – St Paul's, Westminster, Tower of London, Greenwich, and County Hall. Other views are of landscape and townscape interest, with most including a range of heritage assets that form key components of their character.

Key points of relevance

- The LVMF sets clear expectations on applicants for evidence submission. A three-step assessment process is defined, information requirements set, and detailed technical guidance provided (e.g. standards for AVRs). This provides clarity for applicants and planning authorities alike, and a framework through which the latter can ensure sufficient information for informed decision making. This represents a marked enhancement of controls granted through the NPPF, albeit for a limited selection of the city's designated heritage assets and valued viewpoints.

- The LVMF illustrates the inherent tensions between practices of town/landscape and visual impact assessment, and heritage impact assessment. The LVMF considers many matters relevant to heritage management, and is often implicitly engaging with issues of setting. Nonetheless, this research's consultation with stakeholders has identified a frustration that the method too frequently supersedes established good practice for heritage assessment (e.g. GPA3), resulting in an incomplete picture on heritage significance, and impact upon it. An example is a common focus on the perceived design quality of a tall building scheme as the core metric for determining impact - a 'high quality' or 'world class' design can be promoted as positive (in townscape terms), without due consideration of heritage impacts by virtue of setting (e.g. cumulative impact).

- Despite its imperfections (for heritage) LVMF sets a valuable precedent for the need to carefully consider townscape and visual impacts from tall building development within the city. Whilst the LVMF is narrowly focussed for heritage, the importance of setting as a planning concept and practice is explicit throughout. The methodology has also been applied widely across the boroughs in development scenarios beyond the designated views. Whilst not the ideal form of heritage assessment, the widespread adoption of a tool that promotes greater scrutiny of impacts by virtue of setting, and raises benchmarks for the quantum and quality of submitted evidence, can be welcomed.

Step 3: Description of the proposal and its impact on the view

The applicant should provide sufficient information to describe the proposed development, its precise location, setting, height, scale, design, external appearance and relationship to important buildings and landmarks to enable an evaluation of how it would be experienced from the Assessment Points agreed in Step 1. The assessment of effects on Designated Views should also refer to the following factors relating to the proposal:

- The scale, grain and massing of the proposal in relation to the existing townscape;
- Its appearance and materials (that may include, for example, texture, colour, scale and reflectivity);
- The effects on the skyline;
- The obstruction of existing views and any loss of views to the identified landmarks;
- The visual relationship of the proposal to its setting and surroundings;
- Night-time effects/lighting, including aviation and other lighting, and their impact on the landmarks and the viewing experience generally;
- Seasonal changes, weather and atmospheric conditions (assuming the best possible visibility),
- Any shadowing from other buildings;
- The effect of the distance between the viewer, the elements of the view and the proposal.

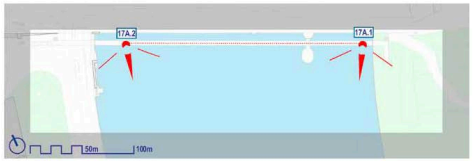
LONDON VIEW MANAGEMENT FRAMEWORK

SUPPLEMENTARY PLANNING GUIDANCE

MARCH 2012
LONDON PLAN 2011
IMPLEMENTATION FRAMEWORK

MAYOR OF LONDON

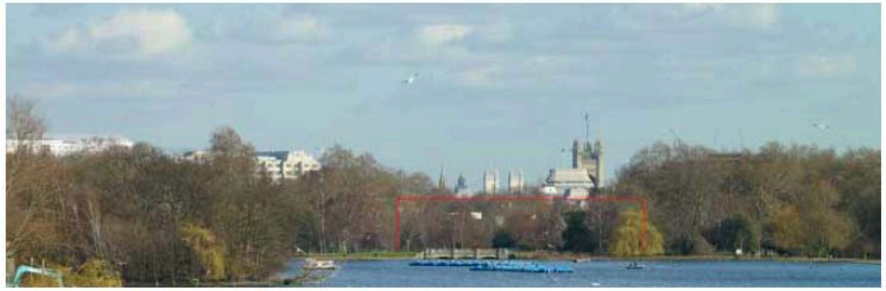
Viewing Location 17A
Golden Jubilee/Hungerford Footbridges: upstream



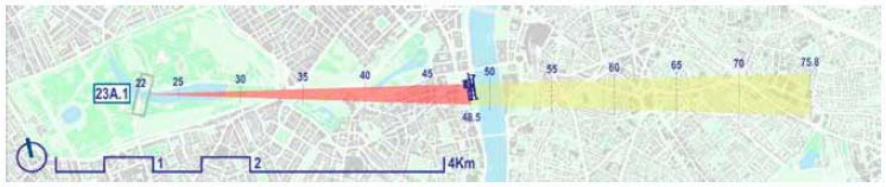
N.B for key to symbols refer to image 1

Panorama from Assessment Point 17A.1 Golden Jubilee/Hungerford Footbridges: upstream - close to the Lambeth bank

Panorama from Assessment Point 17A.2 Golden Jubilee/Hungerford Footbridges: upstream - close to the Westminster bank



Telephoto view of Protected Vista from Assessment Point 23A.1 to Palace of Westminster



Annotated map of Protected Vista from Assessment Point 23A.1 to Palace of Westminster

Images:

Page	Reference	Originator
Front	BMAG & 103 Colmore Row	Anne-Marie Hayes
4	Birmingham skyline	Node
7	London skyline	Historic England
12	St Philips & 103 Colmore Row	Historic England
17*	St Michael's Manchester scheme	Hodder + Partners
21*	Southbank Place Lambeth visual	Canary Wharf Group and Qatari Diar
21*	103 Colmore Row visual	Sterling Property Ltd.
21*	Hadrian's Tower visuals	The High Street Group / Faulkner Brown Architects
23*	Cumulative impact Hadrian's Tower	The High Street Group / Faulkner Brown Architects
23*	Cumulative impact 103 Colmore	Sterling Property Ltd.
25*	Hadrian's Tower visual	The High Street Group / Faulkner Brown Architects
25	Hadrian's Tower delivered	Historic England
25*	103 Colmore Row visual	Sterling Property Ltd.
25	103 Colmore Row delivered	Historic England
26 & 27	London skylines	Historic England
29	BMAG & 103 Colmore	Node
32	Beckley Point	Historic England
33*	St Michael's visuals	Hodder + Partners
38	City of London	Historic England
42*	Oxford High Buildings extract	Oxford City Council
45	VU.CITY screenshots	VU.CITY website
57 & 58*	Southbank Place visuals	Canary Wharf Group and Qatari Diar
57 to 59	Southbank Place completed	Historic England
61 to 63	St Michael's visuals	Hodder + Partners
65	Reading map	Google Earth / Node
65*	Thames Quarter, Reading	Lochailort / Callison RTKL
65*	The Blade, Reading	PMB Holdings and Aviva / Sheppard Robson
65*	Chatham Place, Reading	Atlantis Estates / Cartwright Pickard
69*	103 Colmore Row visuals	Sterling Property Ltd.
69	103 Colmore Row delivered	Historic England
71	Cambridge Local Plan extracts*	Cambridge City Council
73	Oxford High Buildings extracts*	Oxford City Council, LDA Design & Headland
74	Oxford viewcones assessments*	Oxford City Council & Historic England
77	York Central CAAMP*	York City Council, English Heritage & Alan Baxter
79*	Hadrian's Tower visuals	The High Street Group / Faulkner Brown Architects
79	Hadrian's Tower delivered	Historic England
81*	Beckley Point visuals*	Boyes Rees Architects
81	Beckley Point delivered	Historic England
83	LVMF extracts*	Mayor of London & GLA
84	St Paul's skyline	Historic England

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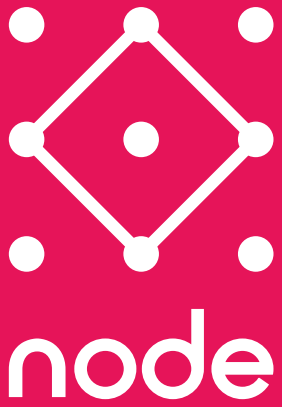

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