

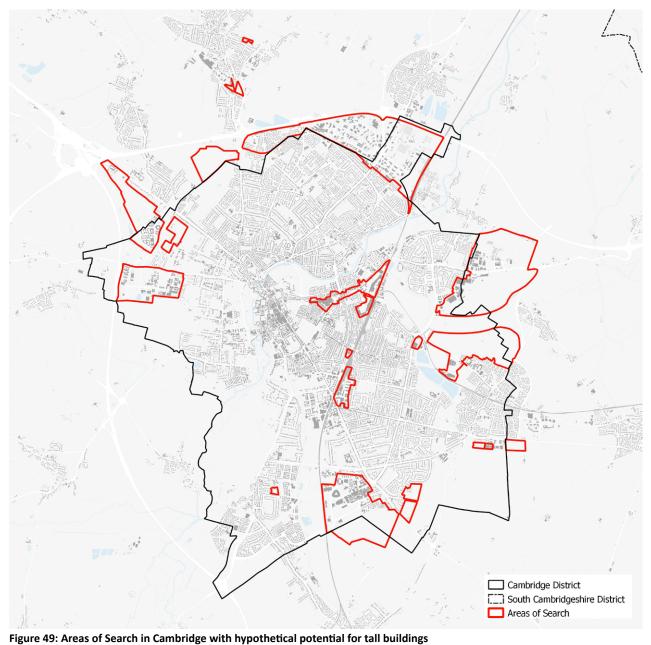
Figure 48: Step 4: Removal of areas below 1ha

Cambridge District

South Cambridgeshire District

Excluded areas (smaller sites under 1ha)

Area with promoting factors for tall buildings



meet the criteria for an acceptable skyline impact, and are therefore not recommended as potential Areas of Search.

6.5.15 The sifting identifies 39 sites as Areas of Search, that may potentially offer an opportunity for tall buildings. 19 sites are situated within (or contiguous with) Cambridge City, whilst 20 are situated in South Cambridgeshire.

6.5.16 For clarity, the identification of an Area of Search does not imply that tall buildings will be appropriate or encouraged within that area. It simply indicates that the area may have a greater potential to accommodate tall development, due to its recognised capacity for change and its location outside of areas identified as sensitive to tall buildings.

6.5.17 The suitability of any tall building in an Area of Search is subject to stringent assessment, justification and testing of its visual and skyline impact. Given the sensitivity of Cambridge's skyline to tall buildings, the actual scope for tall buildings (especially of greater height) in Areas of Search is likely to be limited.

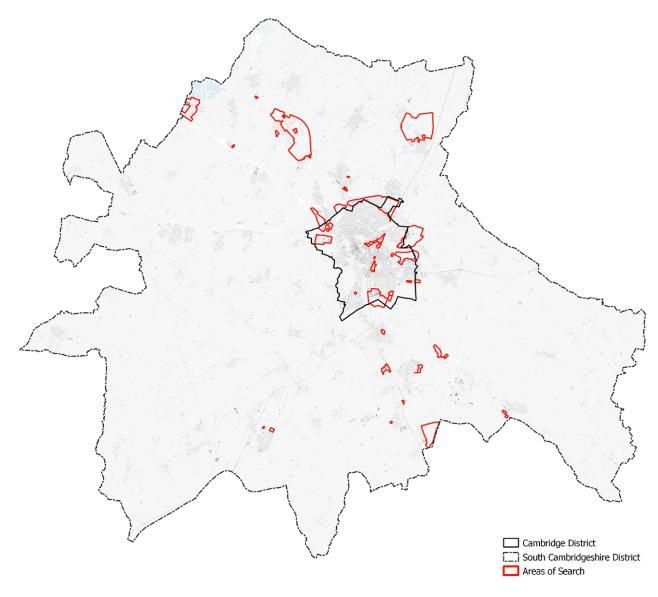


Figure 50: Areas of Search in South East Cambridgeshire with hypothetical potential for tall buildings

# 6.5.3 Testing of major areas of search

6.5.18 Six strategic large-scale Areas of Search were identified by the Greater Cambridge Shared Planning for more detailed investigation into the potential impact of tall buildings on visual sensitivities and the skyline. It should be noted that this testing is a broad-brush exercise, and in some cases, these sites have been subject to further, more detailed testing through the planning application process.

6.5.19 Tested Areas of Search are the following:

- 1 Clifton Road Industrial Estate and Leisure Park
- 2 Newmarket Road (Cambridge Retail Park)
- 3 East Cambridge (Cambridge City Airport and Marleigh and Springstead Village)
- 4 West Cambridge Innovation District
- 5 Addenbrooke's Hospital and Cambridge Biomedical Campus
- 6 Northeast Cambridge (Cambridge Science Park, St John's Innovation Park, Cambridge Sewage Works, Cambridge Business Park).
- 6.5.20 The assessment reviewed the potential visual impact of greater height within the respective Area of Search on selected strategic views of development. This made use of Greater Cambridgeshire's GIS based detailed 3D model. A total of 11 strategic

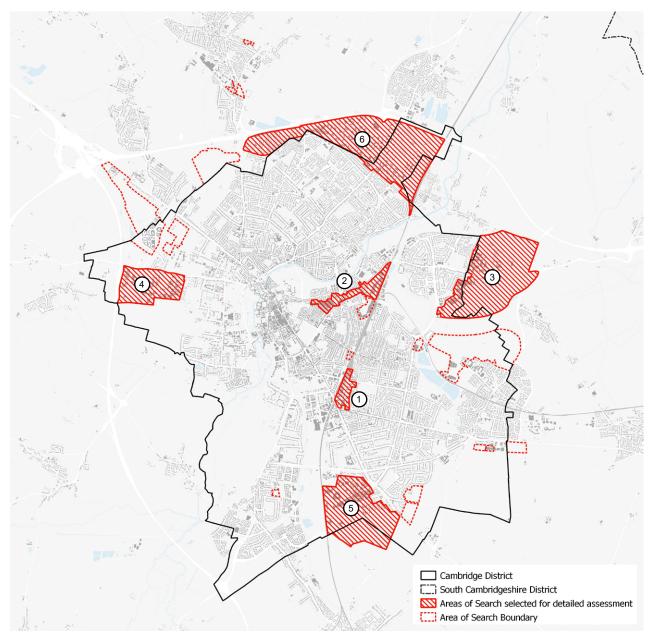


Figure 51: Areas of Search identified for more detailed assessment

views and 6 representative dynamic views were set up in the 3D model.

- 6.5.21 The testing considered three broad height scenarios, which were compared against the base case of the existing context plus permitted buildings:
- Scenario A the applicable tall building threshold for the site, usually of 19m (6 Residential Storeys). This was used to review the effectiveness of the tall building threshold in skyline views;
- Scenario B tall building threshold plus 6.5m (2 residential storeys), usually 25.5m (8 Residential Storeys). This was used to understand the sensitivity of views to a small increase in height;
- Scenario C tall building threshold plus 13m (4 residential storeys), usually 32m (10 residential storeys). This was used to understand a more significant increase in height to what conventionally would be considered a 'tall building'.
- 6.5.22 For each Area of Search render outputs of the base case and the three scenarios of relevant views were produced and reviewed in reference to the visual analysis and description of sensitivities contained in Appendix A (Strategic and Dynamic Views).

- 6.5.23 The render outputs were used to form a professional opinion on the potential degree of impact on views and the skyline that could be expected from tall development. The assessment considered if development and at what height would rise above the tree-line, be visible in the foreground or backdrop of Historic Core landmarks, be prominent on the skyline or break the horizon line.
- 6.5.24 For each Areas of Search a selection of relevant strategic and dynamic views were assessed. The assessment covered the three scenarios in reference to the base case. A summary and recommendations for heights and tall buildings is included for each site.
- 6.5.25 The purpose of this assessment is to provide greater clarity on the potential impact that tall buildings in Areas of Search could have on Cambridge's skyline, and then to provide broad recommendations on the approach to height that could mitigate this impact for each of the six Area of Search. It highlights how height might affect the skyline and identifies sensitive aspects or areas that will require specific attention and scrutiny as part of any future detailed tall building testing or strategy development within the Area of Search.

- 6.5.26 The assessment does not provide detailed area specific guidance on the height or suitability of tall buildings in specific locations in an Area of Search. It also does not replace the need for undertaking a detailed VIA for a proposed tall development.
- 6.5.27 It is recognised that this is a broad-brush simulation, and that in reality. the impact of development will depend on numerous factors, including massing, cumulative effects, modulation and variation in building form (and gaps between buildings), which could either mitigate or amplify the scale of impact. Nevertheless, this exercise is considered helpful and proportionate to the strategic scope of this study, as it allows the identification of broad areas and height thresholds where harm to the defining characteristics of Cambridge's skyline is more likely, or where strategic sightlines and visual relationships may be affected, ahead of any detailed development proposals being drawn up for these sites. More specific testing of impacts of development would need to be undertaken at planning application stage.
- 6.5.28 The key findings and recommendations for each of the six areas of search are included on the following pages. Appendix D includes the detailed assessment of these areas.

# Clifton Road Industrial Estate and Leisure Park

6.5.29 This Area of Search is located in close proximity to the historic core. In many strategic views tall development may appear in the foreground or immediate backdrop of landmarks in the historic core. As such the area is sensitive to greater height.

#### **Overall Summary**

- Scenario A (19m): Minimal impact, with development largely hidden or blending in with existing structures.
- Scenario B (25.5m): Significant Impact in the southern and northern parts of the area is noted in a number of key views (J, E, F and I) where development becomes a noticeable feature against the historic core or affect its setting.
- Scenario C (32m): Significant impact, with skyline alterations, urbanisation of historic backdrops, and interference with verdant views and key landmarks.

#### Recommendations

- Generally height should remain below the tall building threshold of 19m.
- In the central part of the area, individual, finely grained development with a height

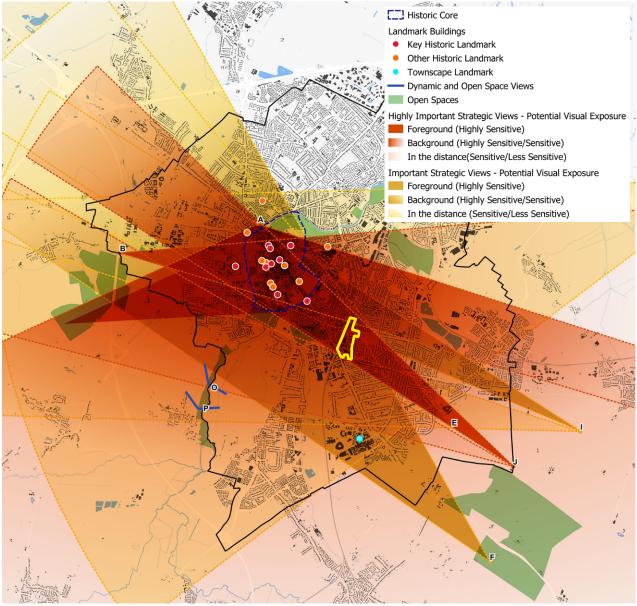
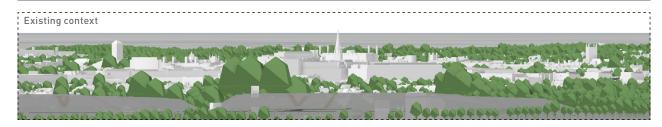


Figure 52: Affected Strategic & Dynamic Open Space Views - Clifton Road Industrial Estate and Leisure Park

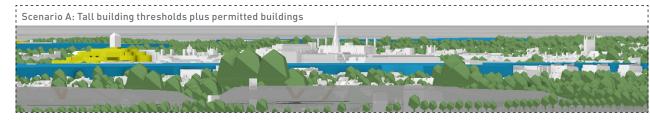
of up to 25.5 metres may be permissible, provided that comprehensive testing demonstrates no detrimental impact on views towards the historic core skyline and that the character of the skyline in these views is retained. Large monolithic buildings, or the clustering of multiple buildings at this height, should be avoided.

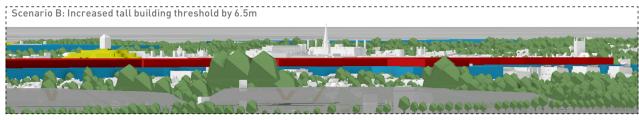
- Principally development of such height should blend in with existing skyline features, for example by visually clustering amongst buildings of increased height to the west and south of the station, and individually avoid creating stark new skyline accents of significant mass.
- The cumulative height scape of development should be comprehensively planned and tested through a masterplanning process, and fixed through parameter plans in local planning frameworks or by outline planning permission.
- Development significantly above 25.5m are not recommended in this area due to the significant impact this may have on views to the historic skyline, and the cumulative impact with existing taller buildings that would have an urbanising effect to the overall skyline character.

#### Example: Strategic View J - Magnified view onto the historic core











# Newmarket Road (Cambridge Retail Park)

This Area of Search is located in close proximity to the historic core. In many strategic views tall development may appear in the immediate backdrop of landmarks in the historic core. From View F, the AOS appears adjacent to the historic core. As such the area is sensitive to greater height.

#### **Overall Summary**

- Scenario A (19m): Minimal impact, with development largely hidden by tree cover and distance.
- Scenario B (25.5m): Generally moderate impact, except in View H, where impact in the northern extent is significant as development becomes visible above the treeline, affecting historic backdrops and rural views.
- Scenario C (32m): Significant impact, with skyline changes, obstruction of historic landmarks, and strong urbanisation of rural landscapes.

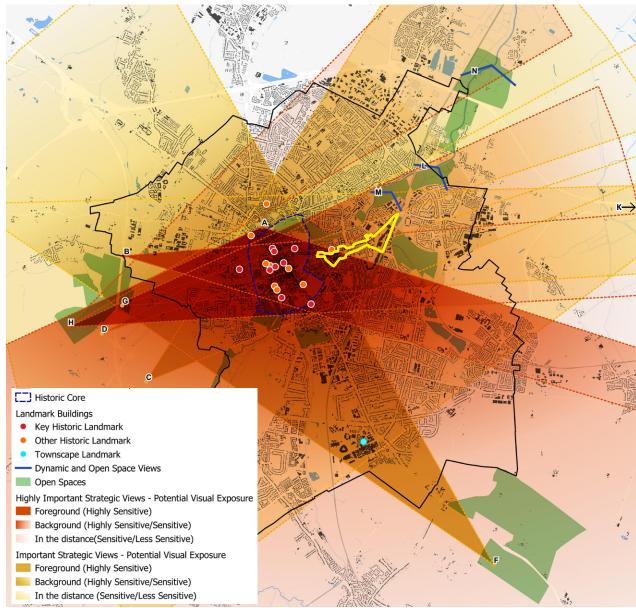


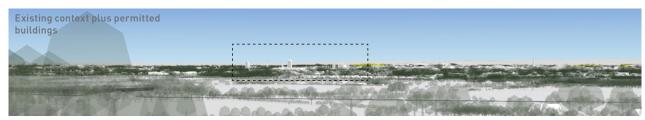
Figure 53: Affected Strategic & Dynamic Open Space Views - Newmarket Road (Cambridge Retail Park)

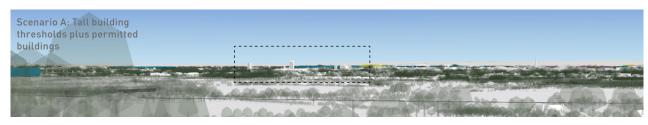
#### Recommendations

- Generally buildings of up to the tall building threshold may be acceptable in the area, with the exception of the northern tip of the site where it may cause visual impacts on Stourbridge Common in local dynamic views.
- Buildings above 19m throughout the area of search are likely to have a significant impact on the skyline in strategic and dynamic views, especially in the western and northern parts, and should only be proposed subject to scrutiny to their impacts on the skyline in strategic and dynamic views and demonstrating a negligible effect on the significance and character of these views.
- Buildings above 25.5m are not recommended in the area due to their significant skyline impacts.

## Example: Strategic View H - Long range panoramic view











# **East Cambridge (Cambridge City Airport and Marleigh)**

6.5.30 This Area of Search is located to the eastern edge of the city. In many strategic views tall development may appear in the distance behind landmarks in the historic core, a considerable distance away. As such the area is less sensitive to greater height.

#### **Overall Summary**

- Scenario A (19m): Minimal impact, with development largely hidden by tree cover and distance.
- Scenario B (25.5m): Significant impact in the northern part of the area, where development may appear in the backdrop of the historic core landmarks (view H) and potentially intrude into dynamic views from the river corridor (View L and N). In view K, development would urbanise the rural landscape context and in the northern and southern extent has an adverse impact on views to key landmarks.
- Scenario C (32m): Significant impact in the northern part of the area, where development may appear in the backdrop of the historic core landmarks (view H) and potentially intrude into dynamic views from the river corridor (View L and N). In view K, development could be domineering in the foreground and urbanise the rural

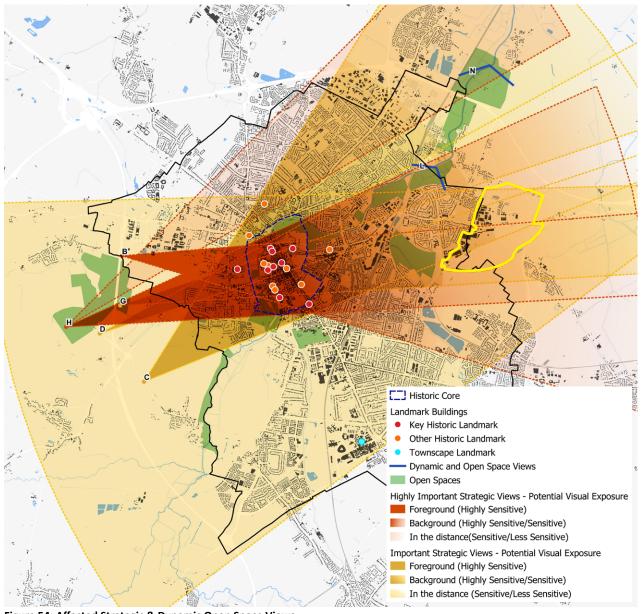


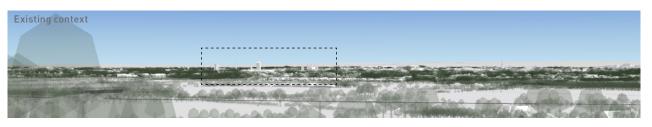
Figure 54: Affected Strategic & Dynamic Open Space Views
- East Cambridge (Cambridge City Airport and Marleigh)

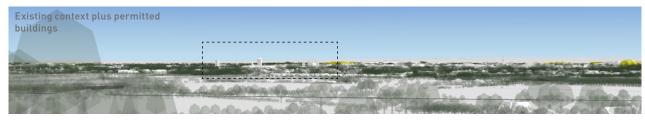
landscape context, and detract or obstruct the view to key landmarks.

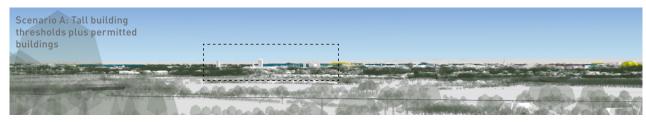
#### Recommendations

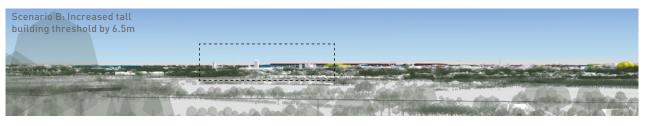
- No tall buildings in the northern part of the site, where it would become visible behind or in the immediate setting of the landmarks in the historic city centre.
- No tall buildings to block views to the Chimney of the Museum of Technology and the Church of Our Lady in View K.
- Potential opportunity for a carefully managed cluster of taller buildings to create a new distinct skyline feature in the central/southern part of the area of search, marking East Cambridge on the skyline and serving as a locally meaningful centre for the emerging neighbourhood.
- Top heights should not exceed 32m to avoid over-dominating the skyline, and the majority of taller buildings should be well below this height.
- General height should step down towards the open landscape interface of the area (north, east and south), and tall buildings should be situated behind a buffer of a minimum of 100m from the edge of the area.

## Example: Strategic View H - Long range panoramic view (Highly Sensitive)











# West Cambridge (Cambridge Institute of Manufacturing and Schulmberger Research Institute)

6.5.31 This Area of Search is located at some distance to the west in relation to the historic core. In many strategic views from the east tall development may appear in the backdrop of landmarks in the historic core. In views from the west, tall development may dominate the foreground of panoramic views, and detract from the view to the historic centre, yet without physically interfering with views to landmarks directly.

### **Overall Summary**

- Scenario A (19m): Significant impact along the southern boundary and in the south eastern corner of the site (Views B and H), where development may detract from the setting of the city centre and the rural character of this view. In other parts of the area of search the impact is negligible.
- Scenario B (25.5m): Significant impact along the southern boundary and on the eastern side of the area of search (views B, H, J, I, O and P), where development my affect the landscape character or detract from the setting of the historic city centre landmarks. A moderate impact of development is noted for other parts of the area, where development may affect the wider setting of the city in the landscape.

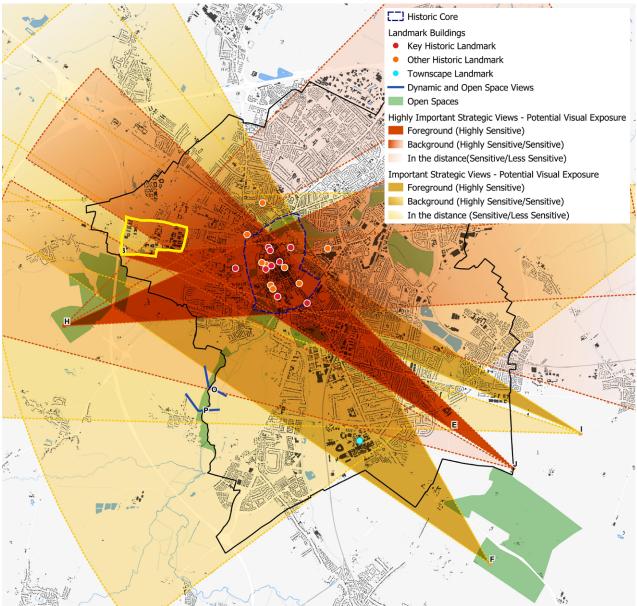


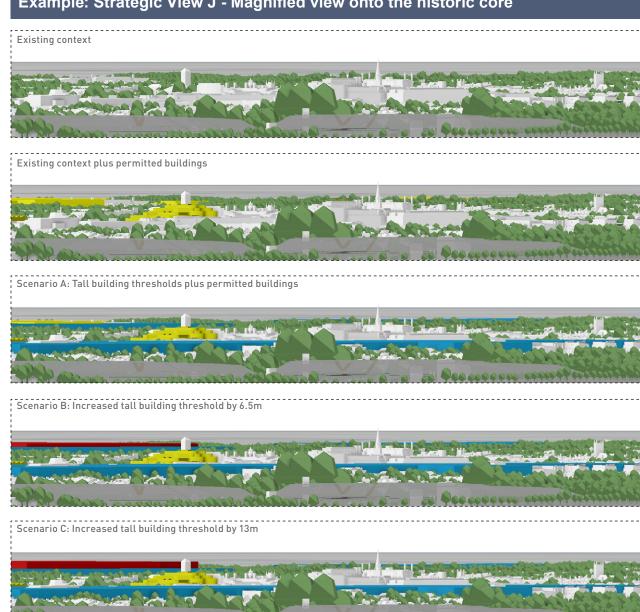
Figure 55: Affected Strategic & Dynamic Open Space Views
- West Cambridge (Cambridge Institute of Manufacturing and Schulmberger Research Institute)

• Scenario C (32m): Significant impact across the entire area (views B, H, J, E, F, I, O and P), where development may detract from historic landmarks, dominate the backdrop to the city, interfere with the horizon line and erode the rural setting of the city.

#### Recommendations

- · Heights up to the 19m tall building threshold may be acceptable in the area of search with the exception to the south eastern corner of the area of search.
- · No tall buildings should be promoted within 100m of the boundary of the Area of Search with the open landscape.
- No tall buildings (above 19m) should be promoted in the eastern half of the site.
- In the western half, buildings should not exceed 25.5m, subject to testing in views.
- Heights should generally step down towards the edge of the Area of Search with the countryside and not exceed 13m on the edge. Note that this area is covered by consented massing parameters in Outline 16/134/OUT that permit a few local highpoints slighly above the broad height recommendations established by this study.

## Example: Strategic View J - Magnified view onto the historic core



# Addenbrooke's Hospital and Cambridge Biomedical Campus

6.5.32 This Area of Search is located at a considerable distance to the southeast of the historic core. The development appears in the foreground of panoramic views from the south east to the city centre. The site is also in the backdrop of the view from Castle Mound.

#### **Overall Summary**

- Scenario A (19m & 25m): Moderate impact caused by 19m development in the urban expansion area urbanises the rural setting of the city.
- Scenario B (25.5m & 31.5m):
   Development of 25.5m height in the urban expansion area may have a strong urbanising effect on the rural landscape setting of the city (views F and Q). The 31.5m height in the existing campus may have a moderate impact in some views (A, K) by consolidating silhouettes of existing tall buildings.
- Scenario C (32m & 38m): Development of 38m in existing campus creates a dominant skyline cluster and detracts from historic core landmarks. Development of 32m in the expansion area has a domineering urbanising effect that clashes with the rural setting and landscape character.

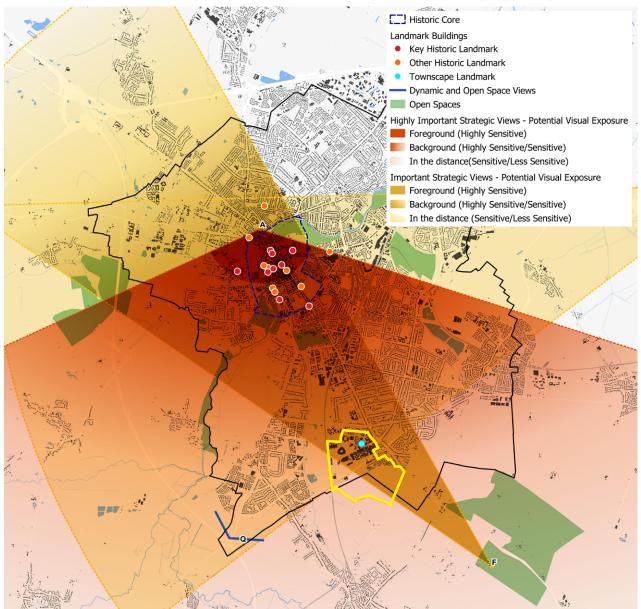
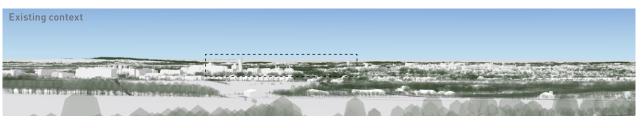


Figure 56: Affected Strategic & Dynamic Open Space Views - Addenbrooke's Hospital and Cambridge Biomedical Campus

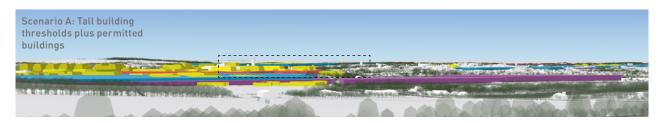
## Example: Strategic View F - Very Long range panoramic view - Sensitive

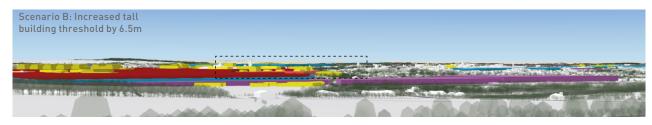
#### **Recommendations:**

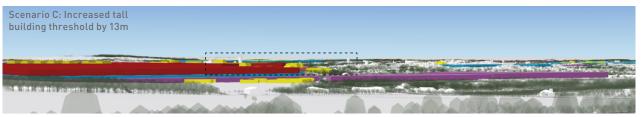
- Tall buildings up to 31.5m in the Addenbrooke's existing campus may be acceptable.
- Building height in the extension area should generally remain below the tall building threshold of 19m.
- Tall development in this area should only be considered in close proximity to the existing concentration of height around the Addenbrooke's campus, where it would blend in.
- The creation of a separate cluster of tall buildings in the expansion area is not recommended due to its proximity to the open landscape and the domineering impact it could have on the landscape character.
- Towards the settlement edge, heights should step down, and a smaller urban grain should be considered to appropriately interface with the rural context.
- Large-scale and uniform massing at the settlement edge or on the skyline should be avoided, and the massing of buildings should be appropriately broken down and articulated.











## **Northeast Cambridge**

This Area of Search is located at a considerable distance northeast in relation to the historic core and may appear in the backdrop of views from the southwest. Given the distance the area is less sensitive to greater height in strategic views. However, the site is situated at the edge with the river corridor and the open landscape, and sensitivity arises from dynamic and approach views of the rural urban interface.

#### **Overall Summary**

- Scenario A (19m): Development near the eastern edge of the area (View L) will have a strong urbanising effect that detracts from rural character of the river corridor. Moderate impact may be observed (View N) with development on the northeastern edge where it may be visible in-between trees.
- Scenario B (25.5m): Development near the eastern edge of the area (View L) will have a strong urbanising effect that detracts from rural character of the river corridor. Significant impact may be observed (View N) with development on the north eastern edge having an urbanising effect on the river corridor.
- Scenario C (32m): Development around Cambridge North Station may have an impact on the setting of the historic core in

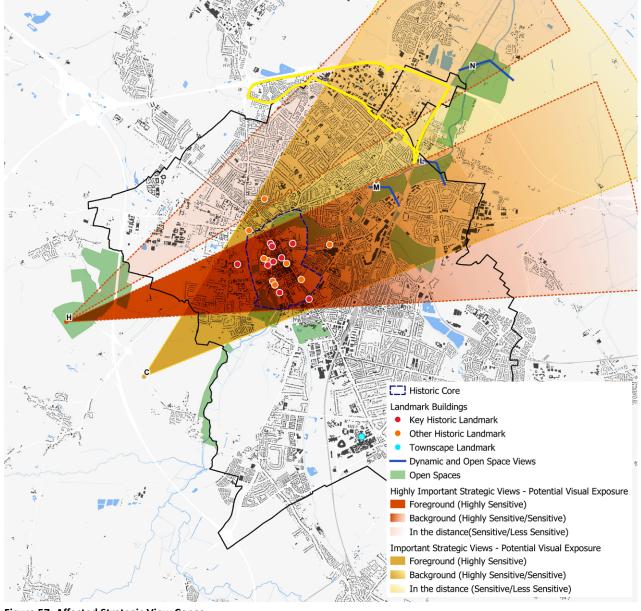


Figure 57: Affected Strategic View Cones