



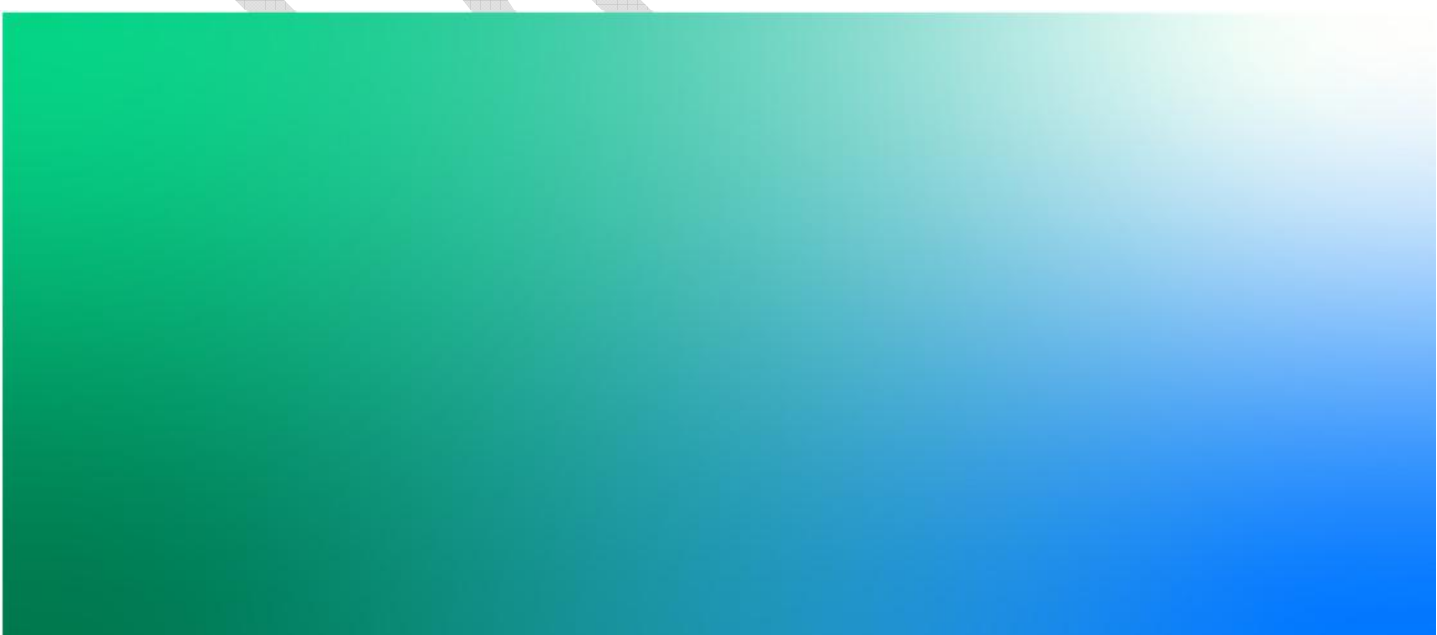
**Cambridgeshire Autonomous Metro
Optioneering and Route Corridors Report – Section for Western Portal**

Work in Progress and Draft and Confidential

Cambridgeshire & Peterborough Combined Authority

Client Reference

DRAFT



1.1 West

1.1.1 Overview of locations considered

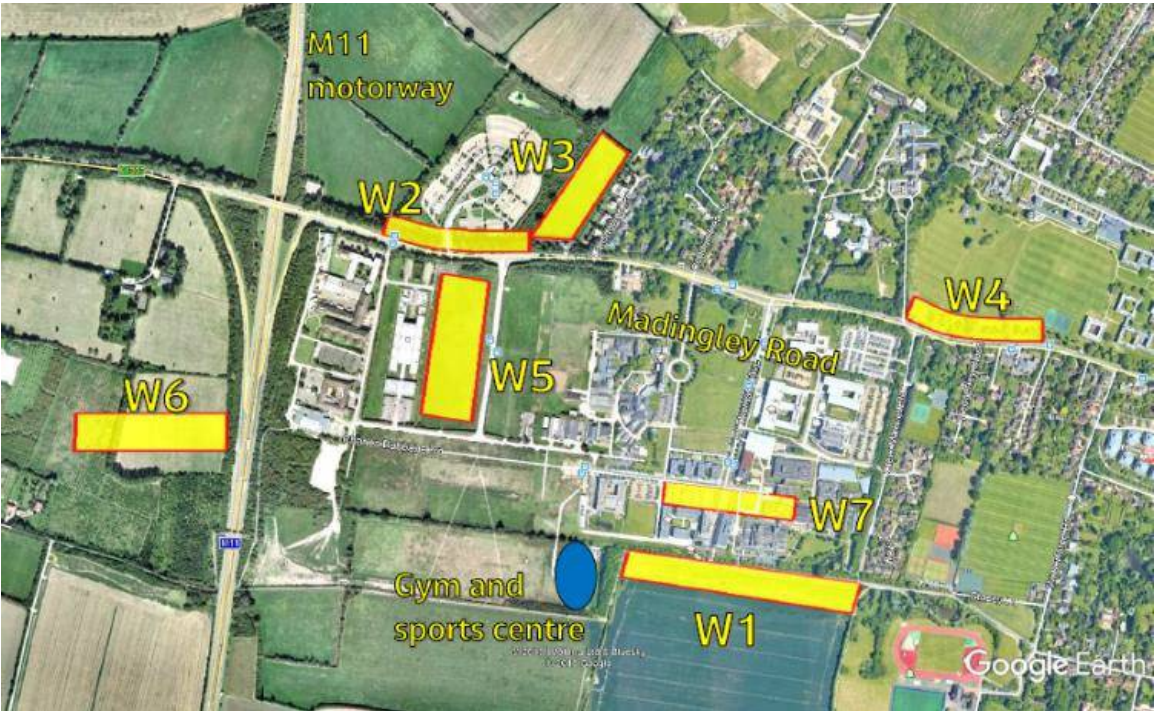


Figure Error! No text of specified style in document.-1: Potential sites for the western portal.

Portal W1 is the location identified in the SOBC report. Locations were shortlisted on the criteria that they might adequately serve the University of Cambridge (UoC) West Campus, connect to the CAM scheme intended to serve Cambourne to Cambridge (C2C) and onward to St Neots.

1.1.2 W1

This location is the same as that identified in the SOBC report. The location is currently a strip of a much larger field, bounded immediately to the north by a cycle route which separates the field from the UoC West Campus.



Figure Error! No text of specified style in document.-2: Location W1; UoC West Campus is to left of picture.

The alignment of the route immediately west of this location would be part of the C2C alignment. It is likely that a key stop would be located within the UoC. The location is well-placed for connection to the proposed CAM scheme for the western branch but does not directly serve the existing Madingley Road Park & Ride.

1.1.3 W2

This location is at the front of the existing Madingley Road Park & Ride, on the north side of the main road. This location has been considered because it would enable direct integration with the park and ride, enhancing its connection to the city centre and providing an attractive journey for visitors to central Cambridge.



Figure Error! No text of specified style in document.-3: W2 proposed location, a copse at the front of the Park & Ride viewed from the east.

A portal at this site would be difficult to construct because of the proximity of the busy A1303 Madingley Road and the park and ride. These hem in the site, thus constraining construction unless part of the park and ride were to be given over, at least temporarily, to the construction site.

1.1.4 W3

This location is in an undeveloped field to the east of Madingley Road Park & Ride, between the newly-constructed Eddington Avenue and residential Lansdowne Road.



Figure Error! No text of specified style in document.-4: Field identified as potential portal site W3.

The field was identified as potentially providing a site with enough space for the portal construction and possibly tunnelling, at a location which would serve the Madingley Road Park & Ride, the North West Cambridge development immediately north, and the West Cambridge development to the south. There is potential for the alignment to be routed through the existing park and ride site to provide a very convenient interchange for car users.

There are residential properties neighbouring this field and its designation as part of the Green Belt presents challenges, but its proposed use as part of a public transport system and opportunity for remedial landscaping could mitigate the impact.

1.1.5 W4

This location is further east along Madingley Road, in the sports ground of Churchill College.



Figure Error! No text of specified style in document.-5: Portal location W4, at the edge of Churchill College sports ground with Madingley Road to the left.

The location was included because a portal here would reduce the length of the western tunnels while enabling the system to serve Madingley Road Park & Ride, before continuing to the west. However, between this point and the park and ride, Madingley Road has residential properties close to the road on both sides and it would be difficult to squeeze both the road and a segregated route for CAM into the space available.

The College sports ground provides social value and while the portal could be built with visual mitigation it is thought that the loss of valuable green space would not be preferable

1.1.6 W5

This location is immediately to the east of the Schlumberger Research centre.

It is noted that this field is already earmarked for development as part of the ongoing development of the West Cambridge site. The location has been included for consideration because of its ability to connect into the C2C scheme and enable CAM to serve the nearby park and ride and UoC West Campus.

1.1.7 W6

This location is west of the West Cambridge site, on the other side of the M11 motorway. It has been added for consideration to connect to the C2C proposal for the western branch of CAM. It provides an alternative to remove potential impacts to the UoC West Campus, and provide greater timetable certainty for the west access, as the vehicle would enter into the tunnels before running through the campus.

The site is in the Green Belt and would require careful consideration of environmental and visual mitigation. As the western branch of CAM is already proposed to come through here, the portal could be included as part of its environmental mitigation efforts.

If located here, the portal would immediately take the western branch underground and direct to the proposed City Centre station. It would however add an additional 1.2 km to the tunnel drives (compared to W1) and therefore an intervention shaft would be required in the proximity of W1. The UoC West Campus, Madingley Road Park & Ride and the North West Cambridge development would not have a direct connection unless another underground station was included in the scheme here. Alternatively, C2C services could be routed back from the West Campus to the portal.

1.1.8 W7

Portal W7 is within the UoC West Campus development. The site comprises part of a car park and, at its eastern end, the site currently occupied by the Cavendish Laboratory. The laboratory is scheduled to move to a new site nearby, thus potentially freeing its current site for redevelopment. Although locating the portal here would not have an impact on the greenfield sites. There would be disruption to the operation of the university departments.

A portal here would be well-suited to the likely alignment but requires immediate coordination with the university and the relevant constituent departments, so that it could be incorporated into the redevelopment plan of the area. Connection to the western branch of CAM could be facilitated as the C2C proposal utilises Charles Babbage Road.

1.1.9 Conclusion

Due to its direct connection with the CAM C2C scheme and ability to directly serve the UoC West Campus site, whilst minimising impacts on existing roads, residents, the UoC campus and businesses, the preferred location for the western portal is W1.

W7 remains as a second choice option because there is potential for the portal works to be integrated into the existing redevelopment plans of the vicinity and avoid the loss of greenfield land entailed by W1 and W3. For this option to be progressed requires coordination with the West Cambridge masterplan.

W6 is also included as an alternative choice. The main benefit of this site is the ability to connect to the GCP western branch and the ease of construction in an otherwise undeveloped area.