

WESTLINK : PROPOSED NEW CROSS-CAPITAL ROUTE

London has historically been served by more main line terminus stations than any other major city, and this has had, and continues to have, huge implications for cross-city connectivity. The major congestion and delays suffered by passengers as they are forced disembark from main line train to already packed Tube train have provided the impetus for development of new cross-city rail routes such as Thameslink, the East London Line and CrossRail (currently under construction). Collectively, these cross-capital lines will have a transformational effect upon London's rail connectivity, and planning is already in progress for the next project, commonly known as CrossRail 2.

CrossRail 2 has grown out of the original proposal for the 'Chelsea-Hackney Tube', first put forward in the 1970s. It is likely to comprise a 'heavy rail' route linking the South Western Main Line near Wimbledon with the West Anglia Main Line near Clapton, possibly with a branch towards Alexandra Palace. The Wimbledon - Clapton trunk route will require around 28km of tunnel, and 9 new deep-level underground stations; a project cost of £15 billion has been predicted. The impetus for CrossRail 2 has recently increased, owing to the congestion likely to arise with the projected development of Euston as the London terminus for HS2. With only the Northern and Victoria Lines available to disperse incoming passengers, the projected alignment of CrossRail 2 has been amended to include a new stop at Euston.

Although CrossRail 2 will undoubtedly bring major connectivity benefits for London, it should not be regarded as the only option to relieve congestion at Euston, or to improve cross-city connectivity on a south-west/north-east axis. This paper puts forward the alternative 'Westlink' proposal for a core route linking Waterloo, Charing Cross and Euston that will deliver far greater connectivity than CrossRail 2, for a fraction of the tunnelled length (and therefore cost).

CLC1 : PROPOSED 'CROSSRAIL 2' CROSS-CAPITAL ROUTE

The 'regional' heavy rail option for CrossRail 2 is shown superimposed onto central London's local rail network. All the length shown on the plan will be in deep-level tunnel, with underground platforms at all stations. As previously noted, around 28km of tunnel (twin bore) and 9 underground stations will be required.

CLC2 : PROPOSED 'WESTLINK' CROSS-CAPITAL ROUTE

Westlink's core section - comprising an elevated connection from Waterloo Station to Charing Cross river bridge, an underground route from Charing Cross to Euston, and a further northward tunnelled extension to Gospel Oak - will allow the Richmond-Waterloo, Bromley-Victoria (via the redundant Eurostar curve at Nine Elms) and Orpington-Charing Cross lines to connect to the Euston-Watford and Gospel Oak-Barking lines. A link to the West Anglia main line at Tottenham Hale will effectively replicate the regional functionality of CrossRail 2. 6 main line routes will be connected, for a total tunnelling requirement of less than 5km.

CLC3 : 'WESTLINK' PROPOSAL INTEGRATED WITH OTHER LOCAL RAIL SCHEMES

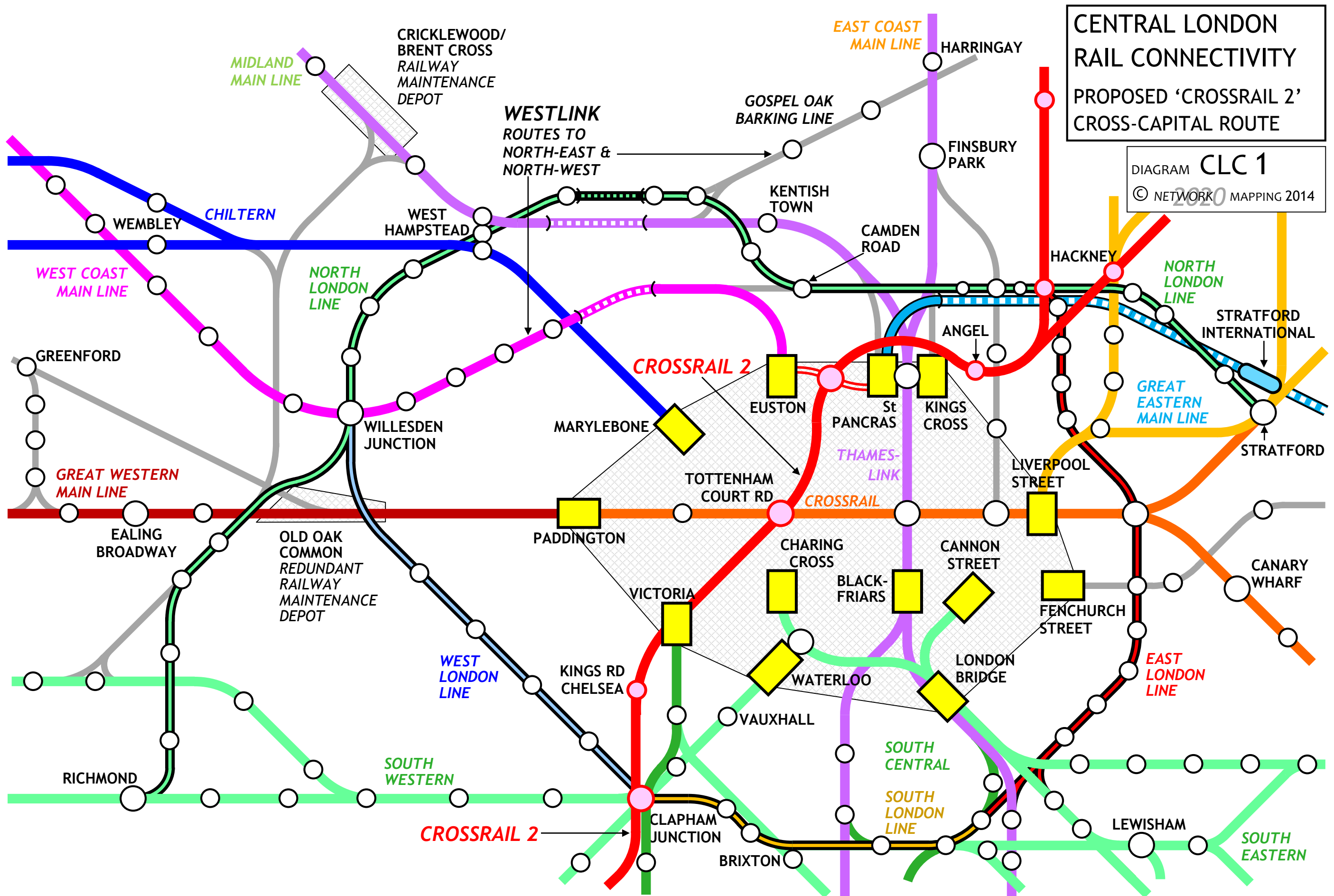
Westlink will be fully integrated into London's local rail network. Interchanges are proposed at Queenstown Road / Nine Elms (also serving the projected Nine Elms development), at Kentish Town West (for North London Line), at Haringay (for Thameslink Great Northern), and at Harlesden (for CrossRail extension to Chiltern).

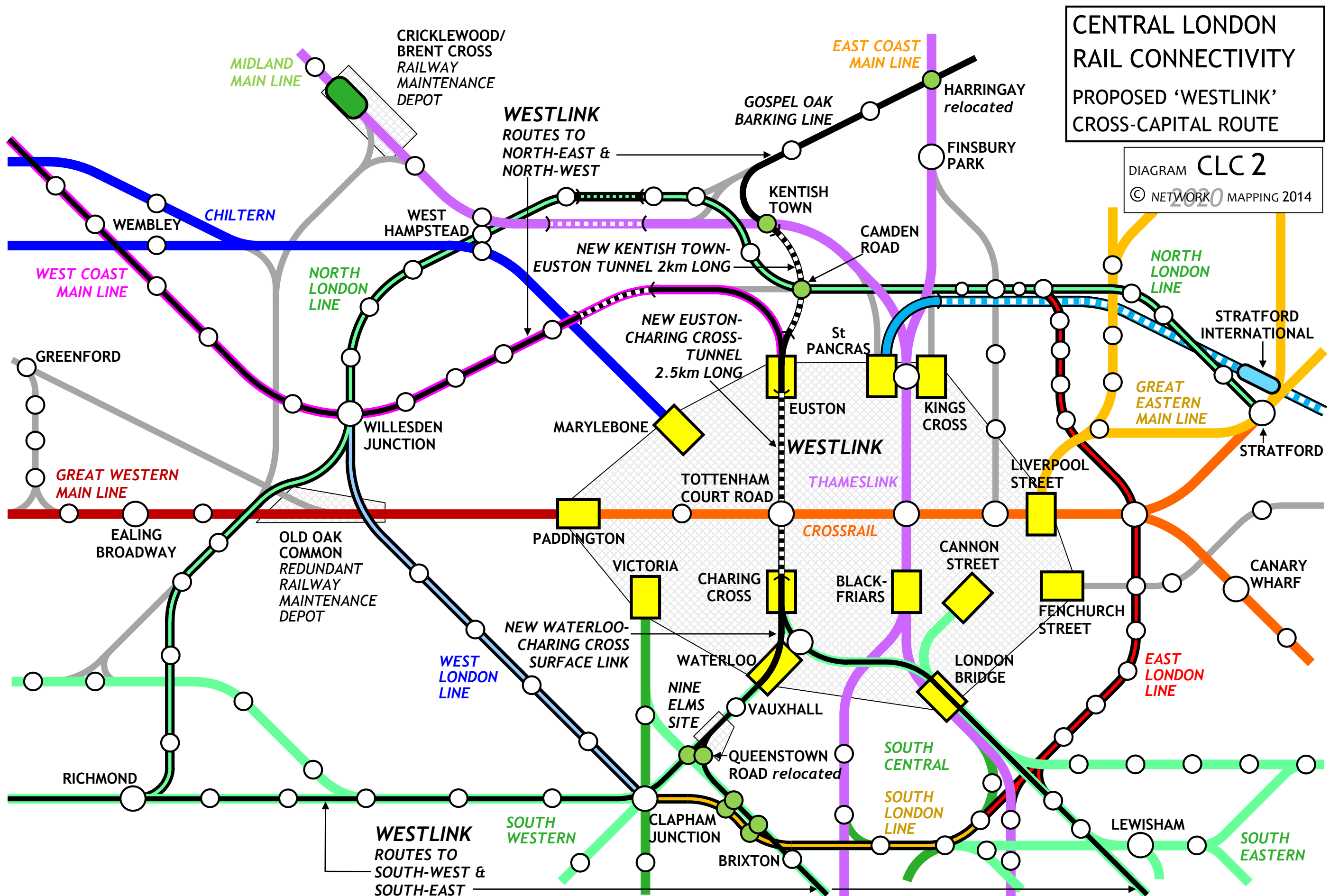
CLC4 : WESTLINK & CROSSRAIL 2: ROUTEING COMPARISONS

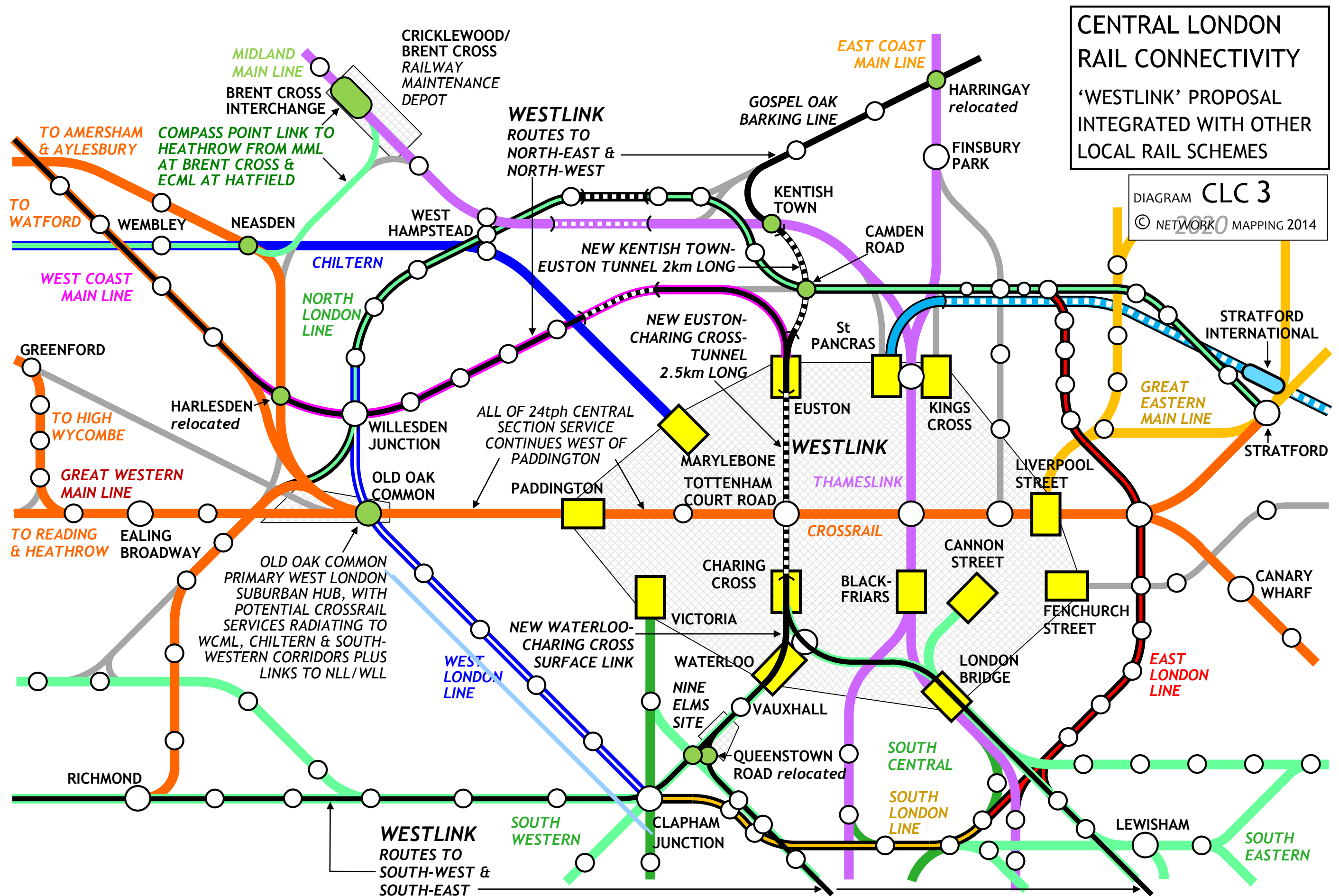
The potential networks facilitated by CrossRail 2 and Westlink are shown together, to allow direct comparison to be made. On the basis of the much reduced length of new tunnelled construction, a notional cost estimate of around £5 billion might be made for Westlink, perhaps £10 billion cheaper than CrossRail 2.

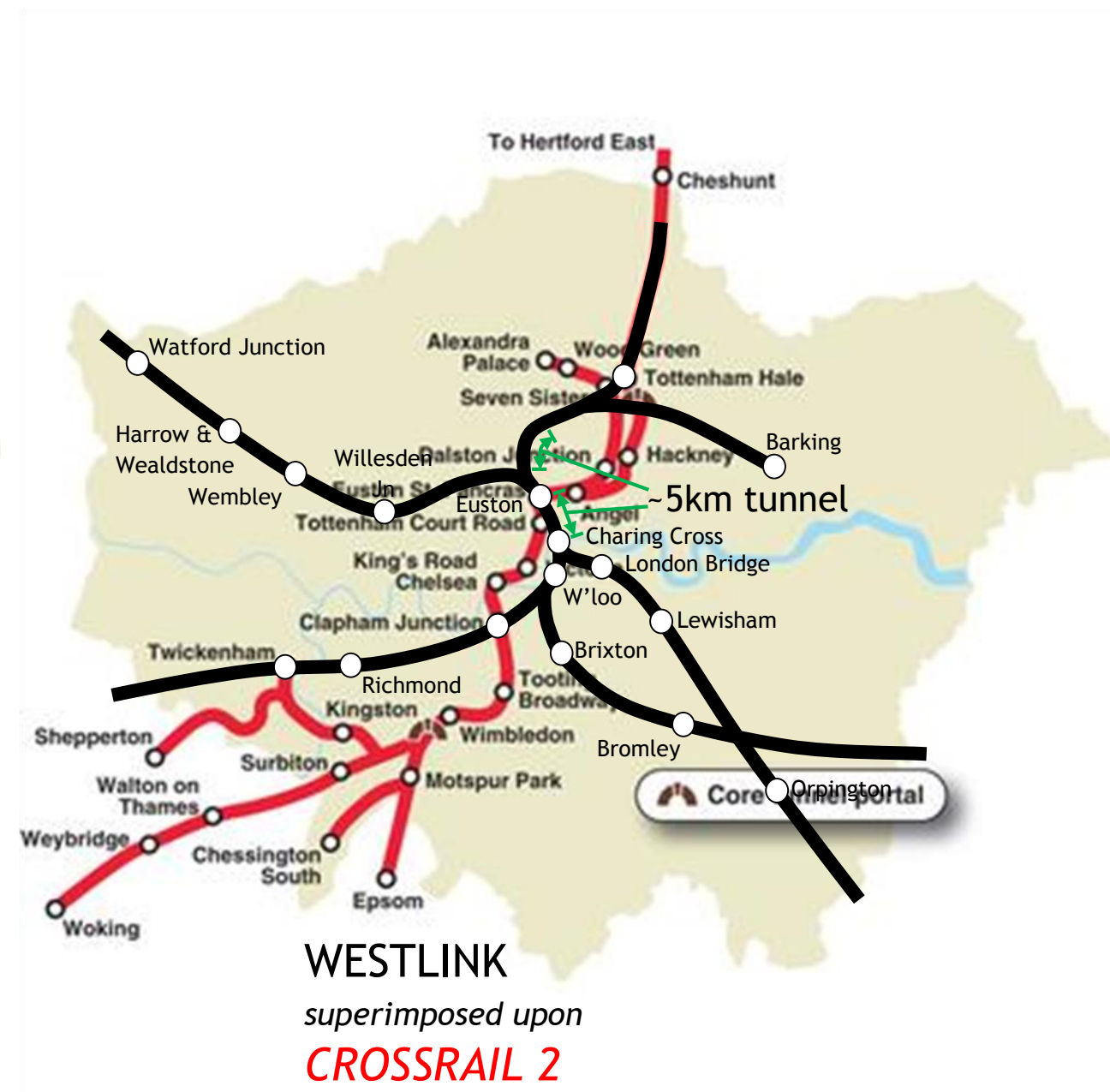
CLC5, CLC6, CLC7 : DETAILED PLANS SHOWING WATERLOO-CHARING CROSS ELEVATED ALIGNMENT

The elevated route between Waterloo and Charing Cross is crucial to the Westlink scheme. The route will enter Waterloo Station via the currently redundant Eurostar terminal, with tracks and structure realigned to continue north on viaduct to connect to the existing line into Charing Cross. The proposed alignment trims the Shell Centre, and this will require major modifications to curve the frontage to align with the new railway. Most of the length of Charing Cross station trainshed must be devoted to the ramp necessary for the new northward tunnelled route to dive below ground level; instead, the Westlink platforms at Charing Cross will be established largely on the river bridge, with major structural modifications required. This presents an opportunity for a direct stair/escalator link to the better-connected Embankment Tube station.









WESTLINK & CROSSRAIL 2:
ROUTEING COMPARISONS

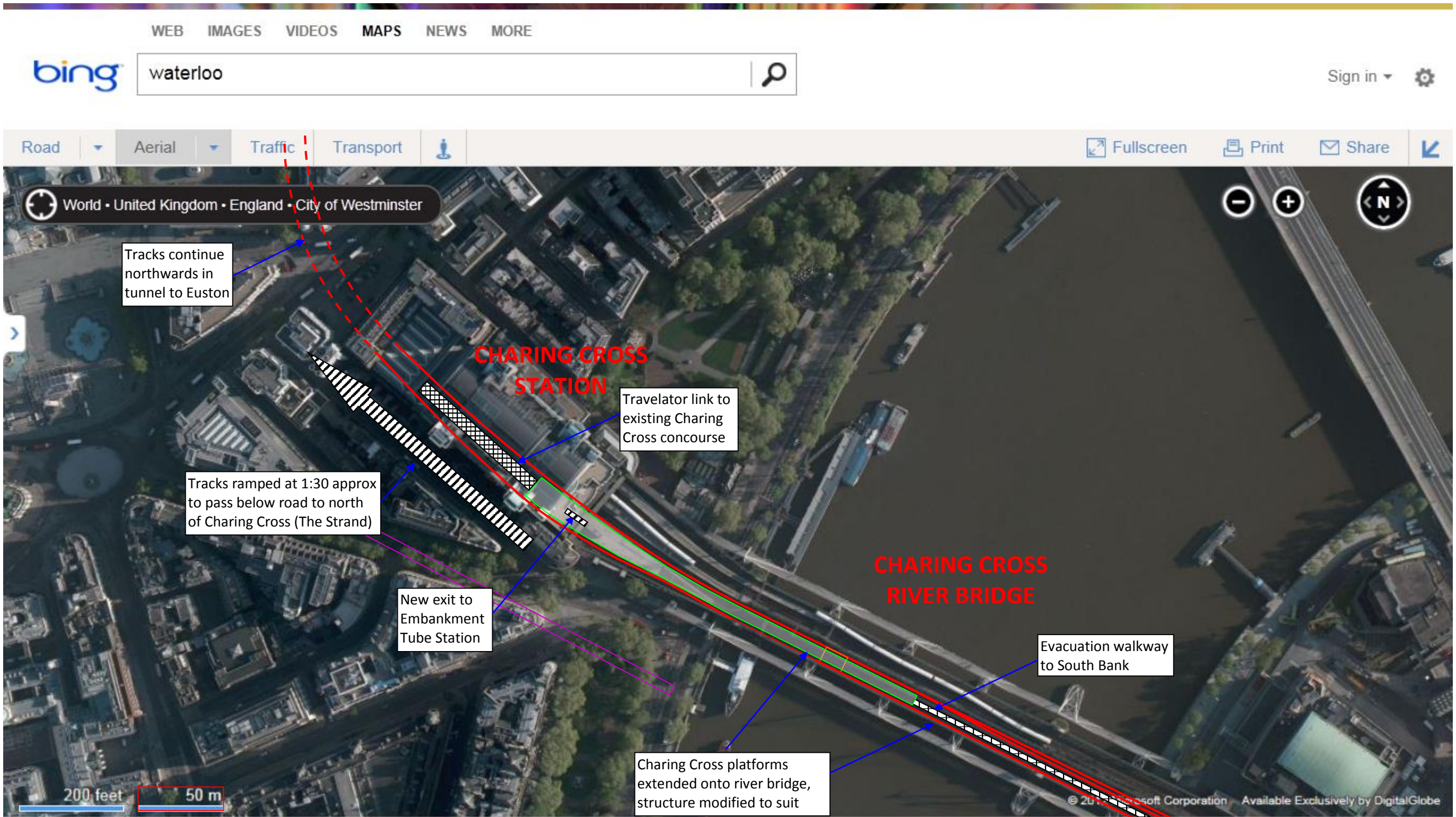


DIAGRAM **CLC 5**
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WESTLINK :
PROPOSED WORKS FOR TUNNELED ROUTE
NORTH FROM CHARING CROSS STATION

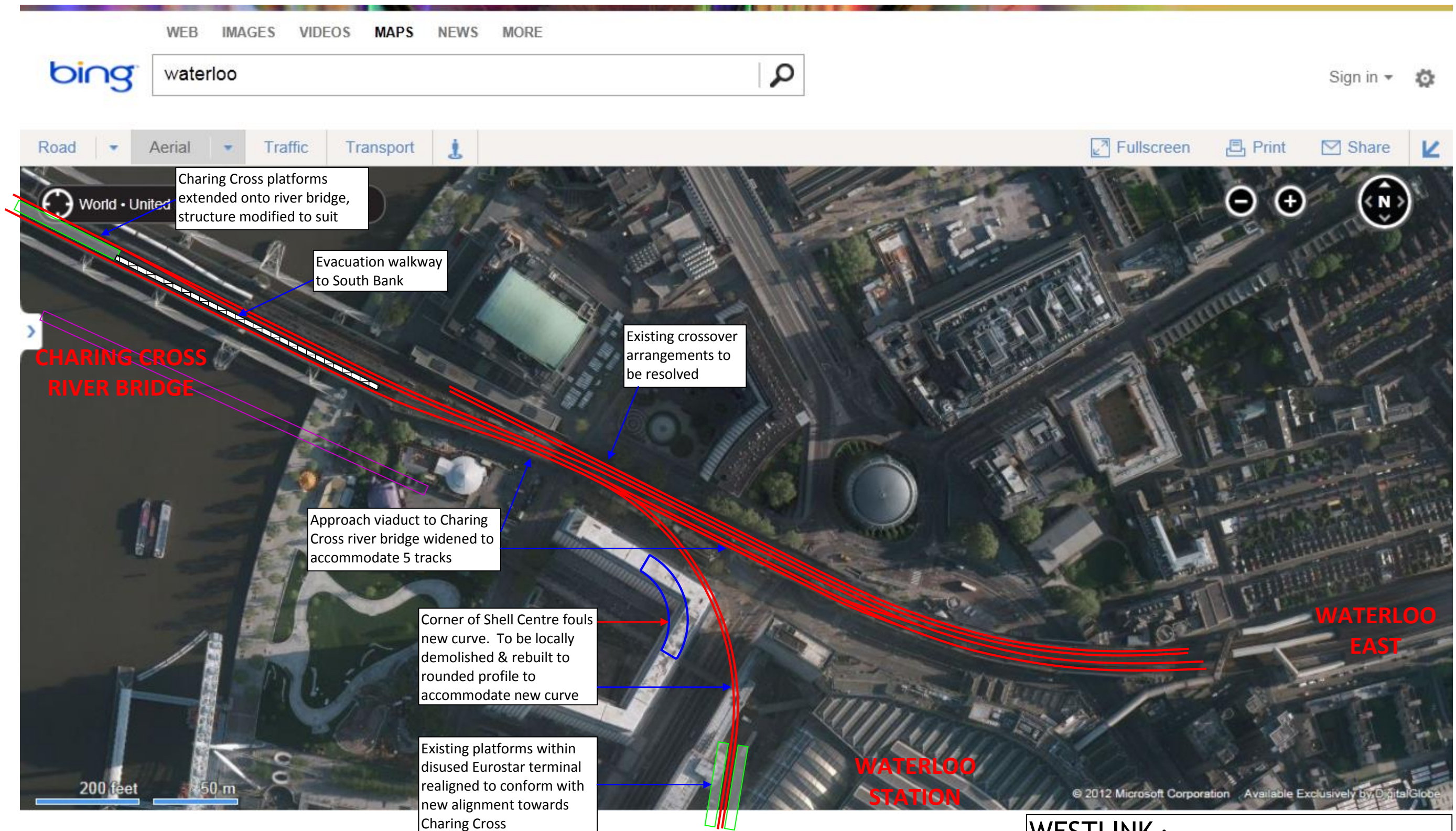


DIAGRAM **CLC 6**
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WESTLINK :
PROPOSED WORKS ON SOUTH-EASTERN
APPROACHES TO CHARING CROSS BRIDGE



DIAGRAM **CLC 7**
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WESTLINK :
PROPOSED WORKS FOR NORTH SIDE
ENTRY INTO WATERLOO STATION