



Bakerloo Line Extension

Old Kent Road Stations Options Assessment
February 2017

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Executive Summary

- E1.1 In 2014, TfL undertook a consultation for an extension to the Bakerloo line from its current southern terminus at Elephant & Castle into south east London. This included asking for people's views on route options to Lewisham and on destinations beyond Lewisham at Hayes, Beckenham Junction and Bromley town centre. The common feature with all the options consulted on was the inclusion of a station at Lewisham town centre, and that itself was assumed to be at the National Rail station that serves the town centre, in order to facilitate interchange between DLR, National Rail and Bus services.
- E1.2 In addition to the consulted options, approximately 4,500 comments were also received regarding other options or routes for an extension. TfL undertook a rigorous and comprehensive assessment of these alternative options and published its conclusions in December 2015. TfL concluded that an initial extension to Lewisham via Old Kent Road is currently the preferred option for improving transport capacity and access and enabling development in south east London. A potential future extension beyond Lewisham remains an option under consideration. More information is available on the TfL website at www.tfl.gov.uk/bakerloo-extension
- E1.3 An assessment of the site options for stations to serve the Old Kent Road Opportunity Area in has been conducted. The assessment has evaluated the performance of each station option against a broad range of criteria to ensure a balanced assessment has been undertaken.
- E1.4 Based on the assessment, we have determined that at this stage there remain two proposed site locations for further consideration and consultation at each of Old Kent Road 1 and Old Kent Road 2 stations - shown in Figure E1 and Figure E2 for the respective options.
- E1.5 These sites have been identified due to a range of reasons including their position relative to existing and planned new communities, their site size and access, their position for links to the local transport networks, their fit with local policies, and their effectiveness for future operations including the potential route alignment.
- E1.6 The next stage of the scheme development will be to enter into discussion with the land owners and to collect feedback from them and the wider public as part of a consultation exercise. This will assist us with the further evaluation and development of the extension proposals.

Figure E1: Proposed Station Site Location Options for Old Kent Road 1 Station

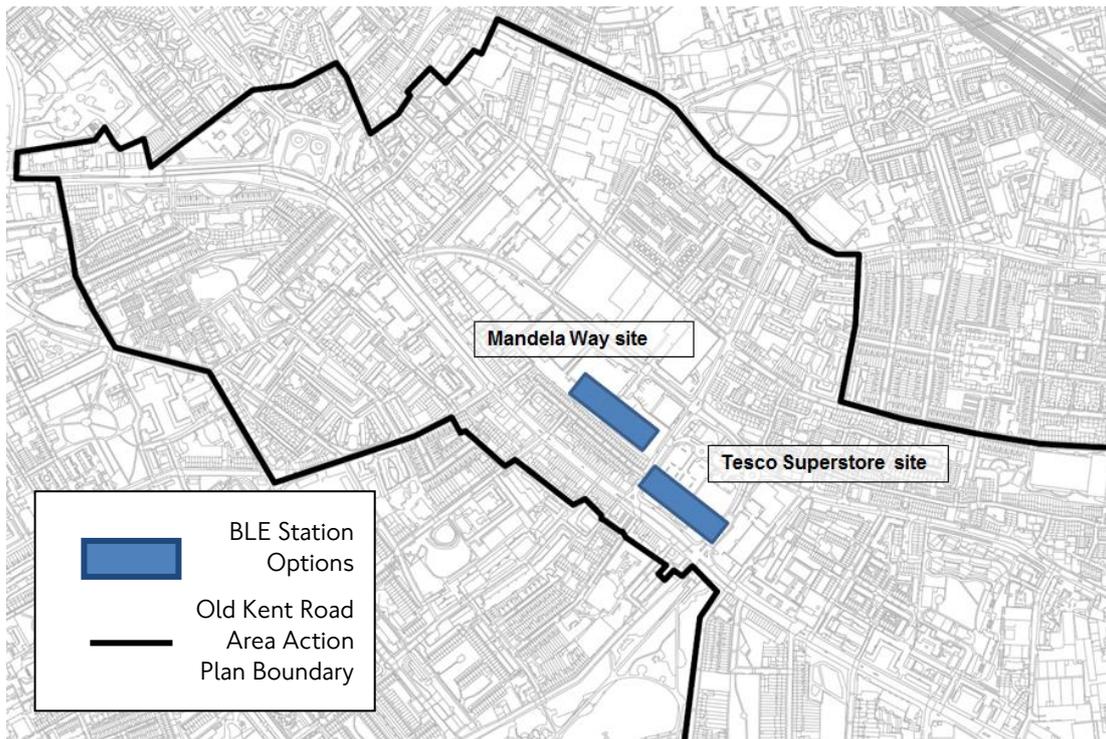


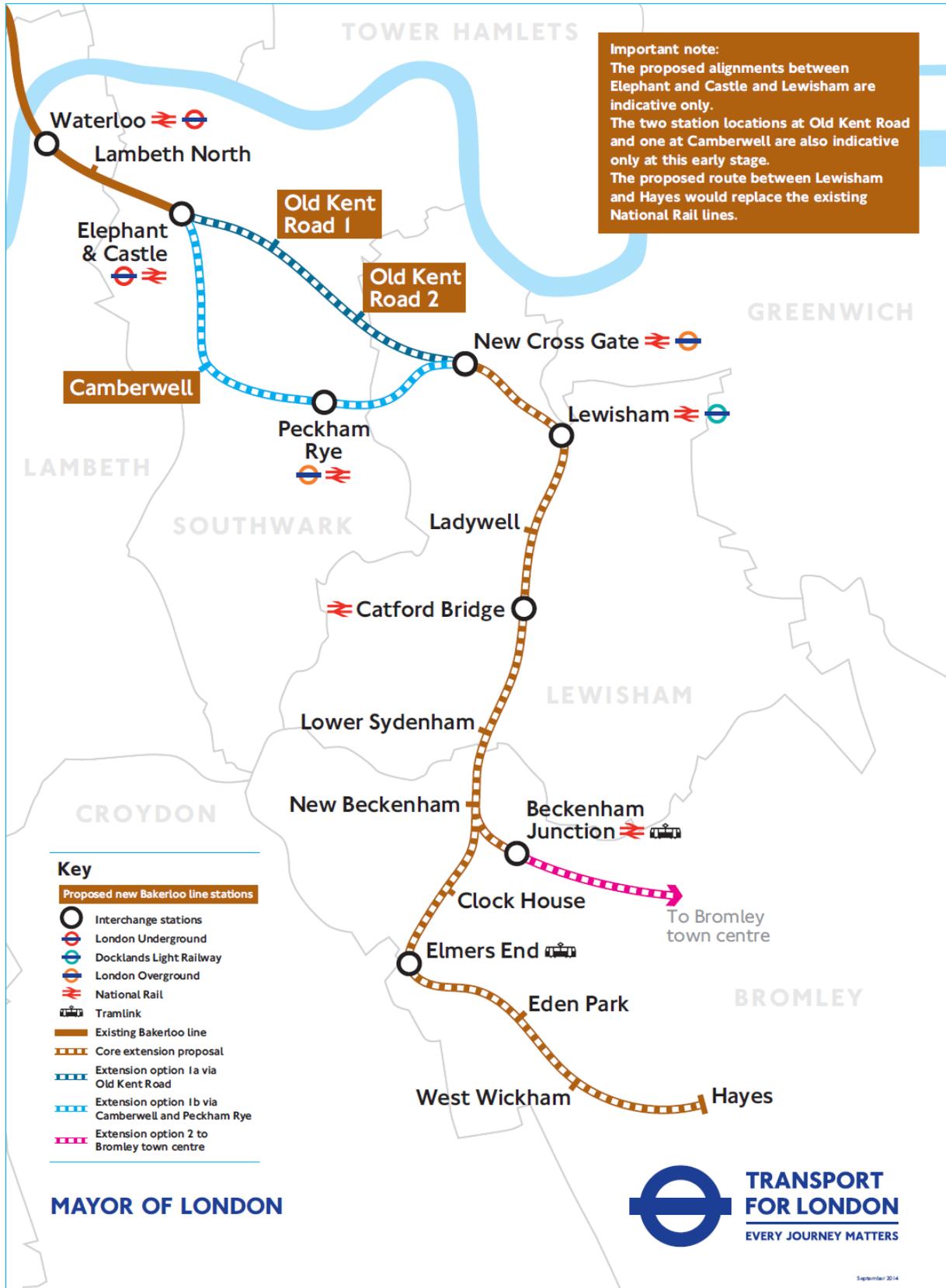
Figure E2: Proposed Station Site Location Options for Old Kent Road 2



1. Introduction

- 1.1.1.1 In 2014, TfL undertook a consultation for an extension to the Bakerloo line from its current southern terminus at Elephant & Castle into south east London. This included asking for people's views on route options to Lewisham and on destinations beyond Lewisham at Hayes, Beckenham Junction and Bromley town centre – see Figure 1. We were clear in 2014 that we have been proposing an extension with two new stations in the Old Kent Road area, but clearly stated that that work was subject to more detailed proposals on the planned redevelopment of the Old Kent Road Opportunity Area becoming clear.
- 1.1.1.2 In January 2016 we published our assessment of the different extension route options and destinations and determined that a route to Lewisham via Old Kent Road and New Cross Gate has the best case for further development.
- 1.1.1.3 This station site options assessment for the Old Kent Road therefore follows the assessment of destinations and areas for the Bakerloo line extension to serve.

Figure 1: Consulted Bakerloo line extension options



2 The context for the Old Kent Road stations

2.1.1.1 As described in the Introduction, the 2014 consultation contained proposals for two stations in the Old Kent Road area. At that time we explained that we considered two stations could be feasible in order to support the OKR Opportunity Area (OA). However this was prior to details of the scale and pattern of regeneration and redevelopment becoming available and therefore we did not rule out fewer or more than two stations.

2.1.1.2 Since 2014, the London Borough of Southwark has developed more detailed proposals for the OKR OA, as set out in the OKR Area Action Plan (AAP). We have considered the proposed pattern of development to help shape our proposals. The pattern of development is shown in Figure 2 to Figure 4, covering the different parts of the overall OA.

Figure 2 - Old Kent Road AAP North Area Proposals

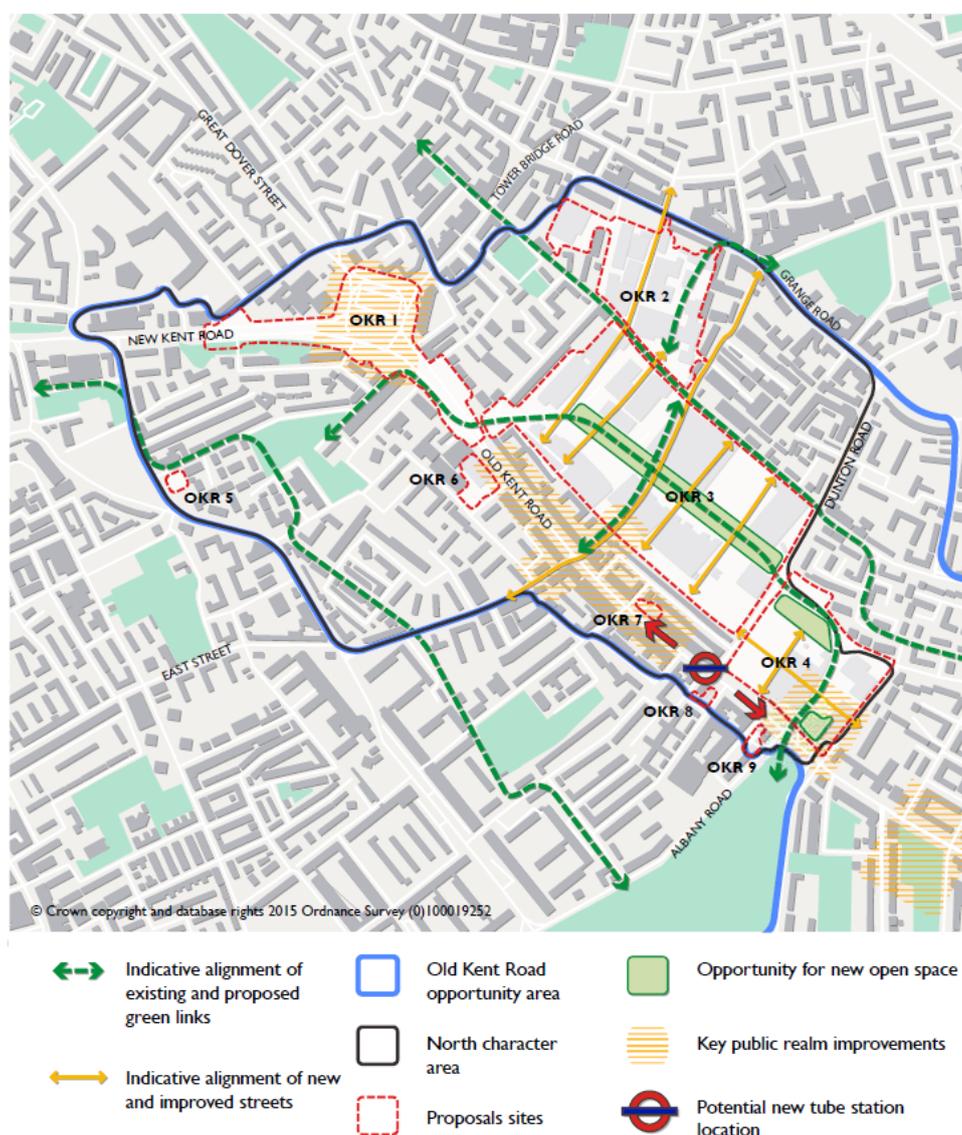
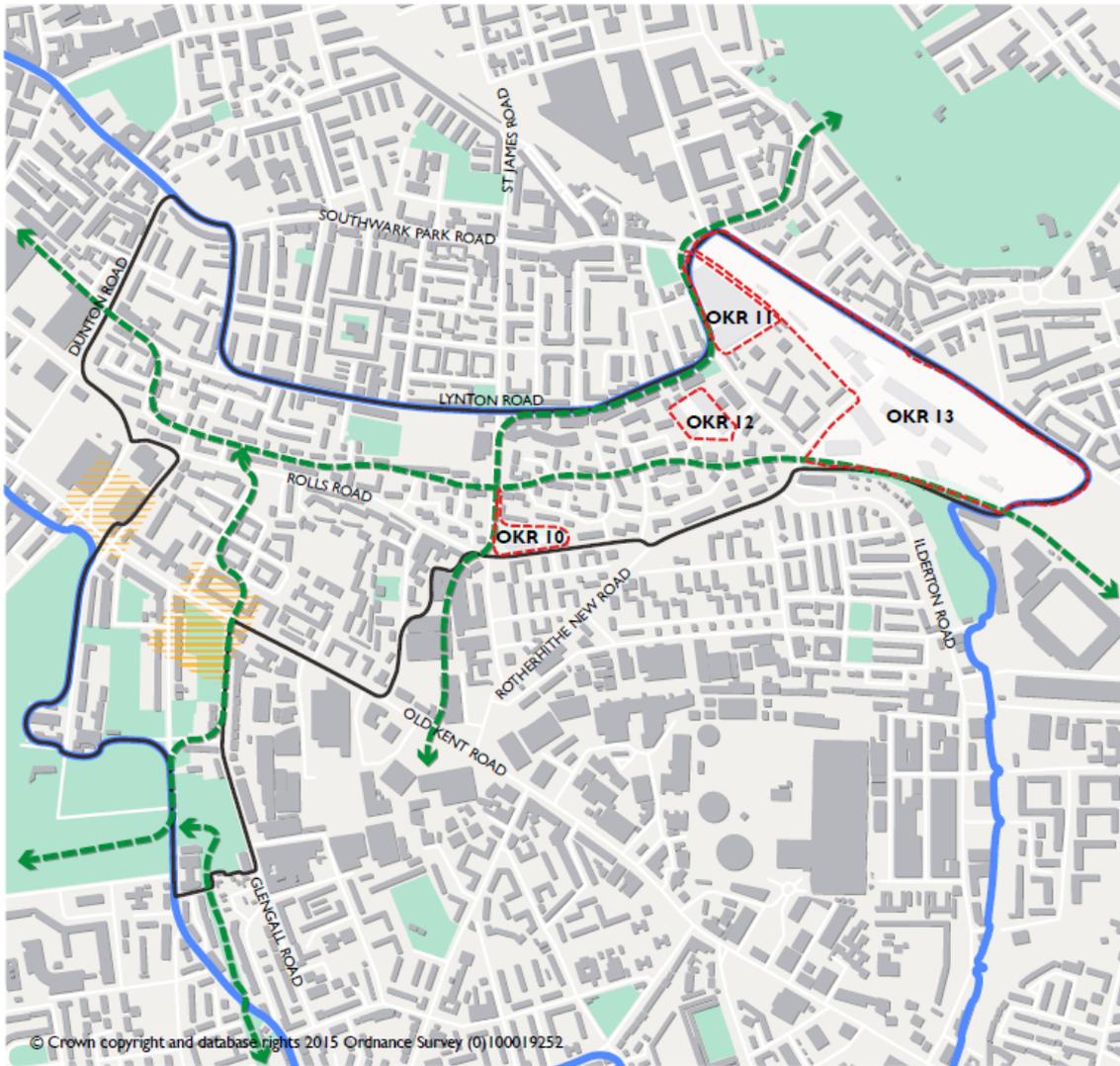
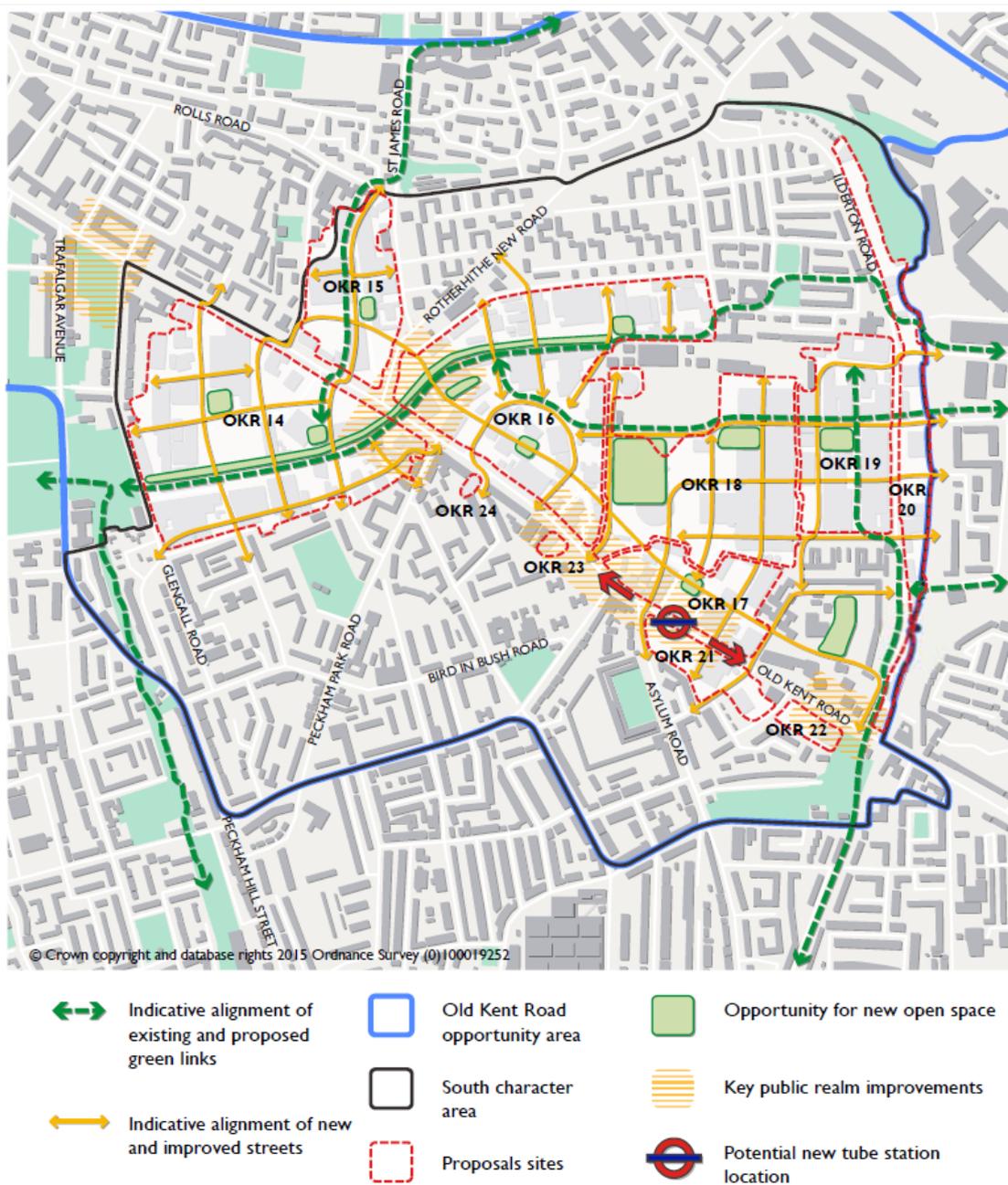


Figure 3 - Old Kent Road AAP Central Area Proposals



- | | | | |
|---|---|---|--------------------------------|
|  | Indicative alignment of existing and proposed green links |  | Old Kent Road opportunity area |
|  | Proposals Sites |  | Central character area |
| | |  | Key public realm improvements |

Figure 4 - Old Kent Road AAP South Area Proposals

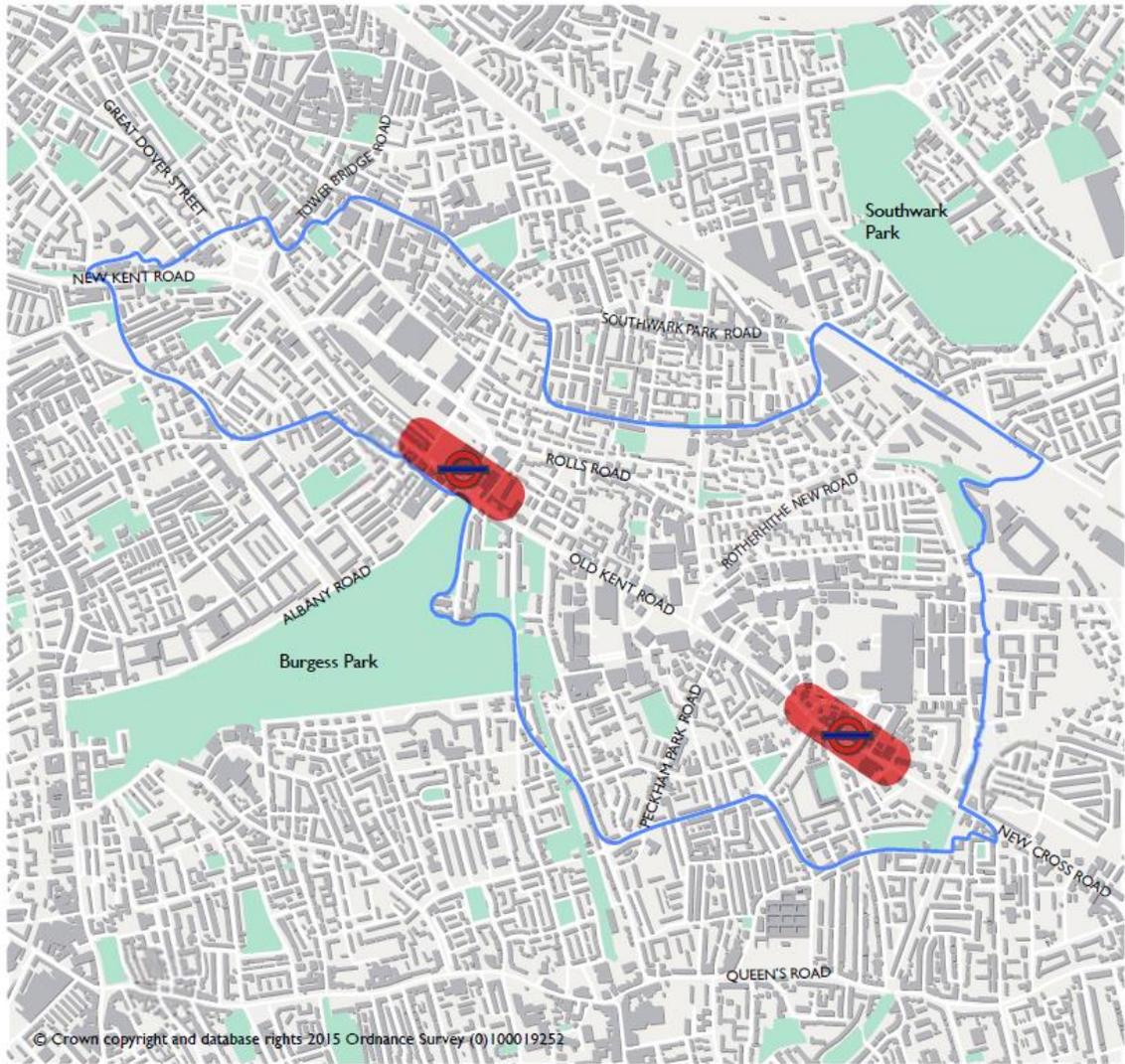


2.1.1.3 Southwark’s consultation on the OKR AAP included a question concerning their own proposal on the areas in the OA that they considered Tube stations could serve. The question asked for views in response to the Borough’s suggested locations of one station between East Street and Burgess Park and the second between Commercial Way and Brimington Park.

2.1.1.4 We have been provided the draft results of those questions enabling us to take into account the initial feedback and additional options proposed prior to our own consultation. Overall 81% of respondents agreed with the proposed locations Southwark has consulted on in figure 6, however

there are a number of other locations suggested on a regular basis, covered in the next section.

Figure 5 - Southwark Old Kent Road Area Action Plan – Proposed potential station locations



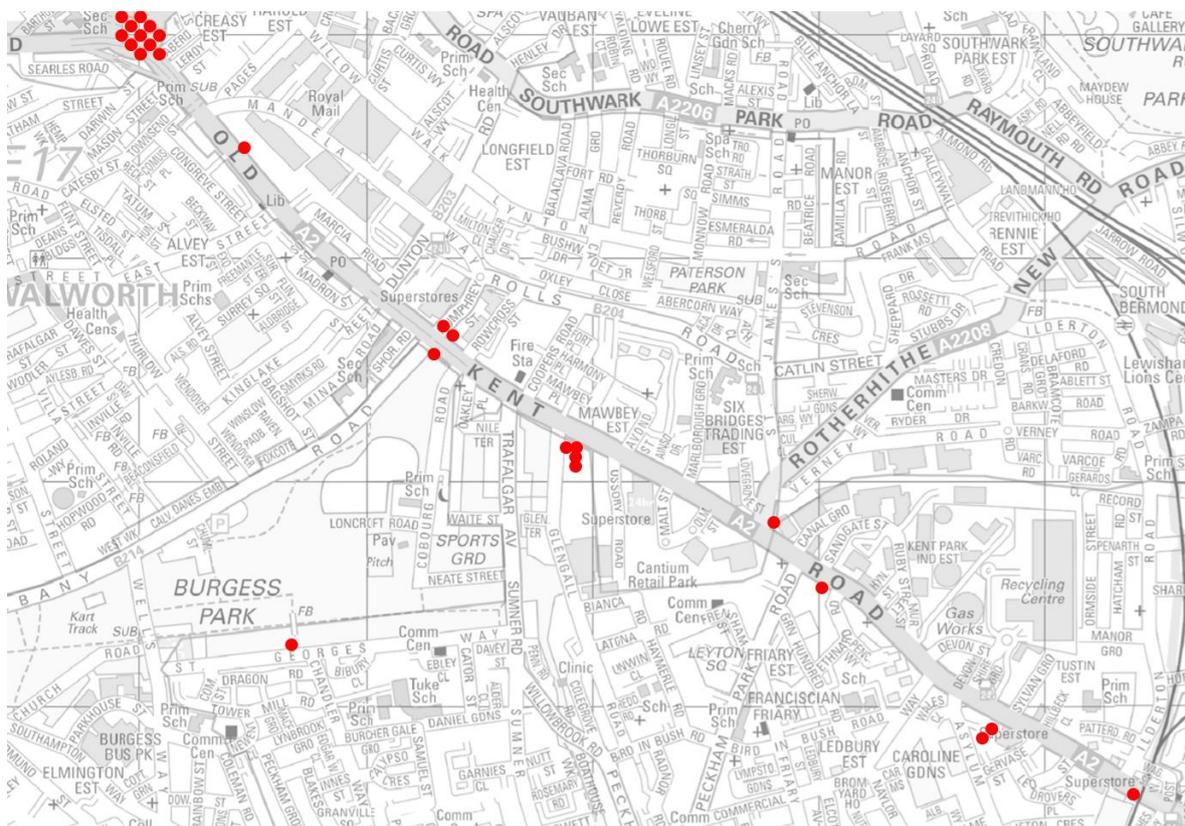
-  Old Kent Road opportunity area
-  Potential station locations

2.2 Key Issues raised in the Southwark Old Kent Road AAP consultation on Bakerloo line station locations

2.2.1.1 We have identified the following key issues from the OKR AAP consultation responses that the Borough has forwarded to us. Please note we have not undertaken a full coding exercise – this will be undertaken by the Borough in due course as part of their wider assessment of the consultation feedback. The responses that identified specific or broad alternative locations in the consultation have had their suggested locations mapped – shown in Figure 6. The key issues raised were:

- Deliver three stations on the Old Kent Road rather than two
- Consider serving the northern end of the Old Kent Road including the Bricklayers Arms Junction area.
- Consider serving the section of Old Kent Road between the junction with Glengall Road and Peckham Park Road.

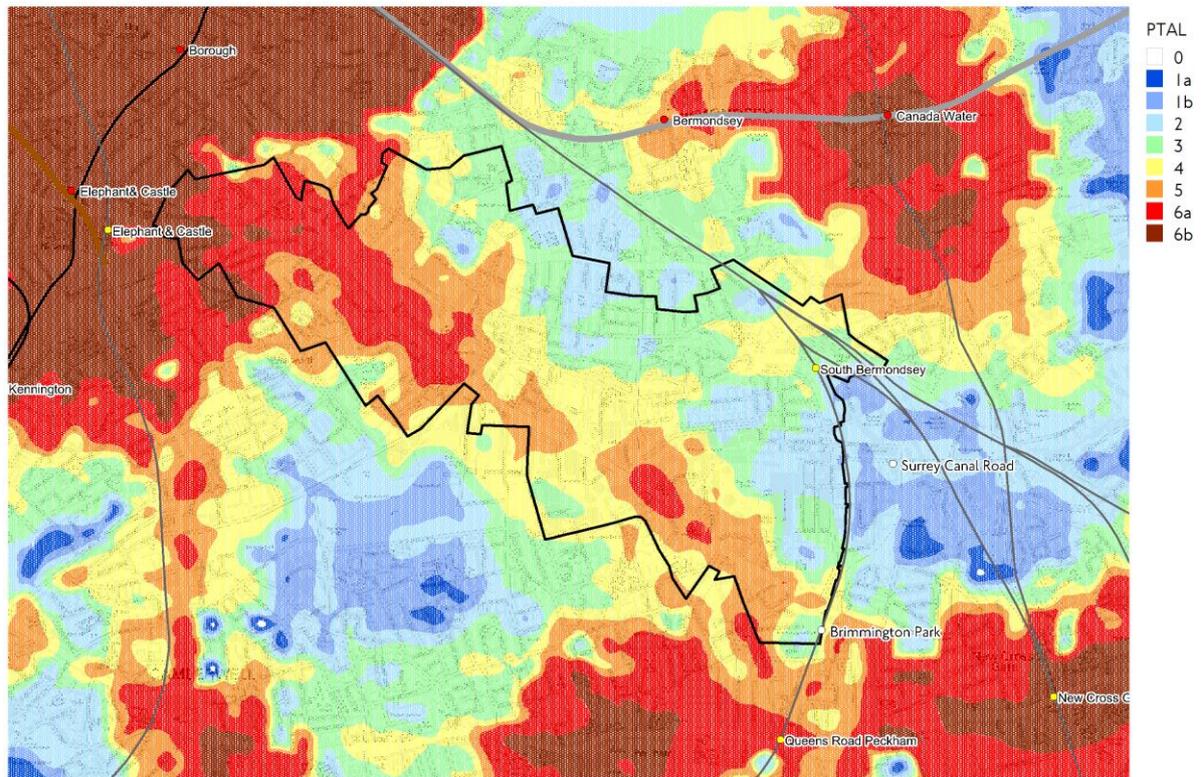
Figure 6 - Suggested locations for Bakerloo line extension stations in Old Kent Road Area Consultation Responses



- 2.2.1.2 The location of each OKR station impacts the other. There is a balance to strike between the proximity of each station. Constructing stations too close together can, subject to the size of local travel market each would serve, result in one or other being lowly used and potentially not providing a value for money investment. Stations situated too far away from one another can lead to long journeys to either one from the local area, leading to passengers taking motorised modes of travel that add to road congestion and lengthens the passengers' overall journey, reducing the benefits of the BLE.
- 2.2.1.3 As part of TfL's consideration of the OKR AAP proposals, we have re-assessed our previous assumption of providing two new stations. The OKR AAP has consulted on two stations rather than three and has indicated where these are considered to best serve the OKR OA. The key aspect in planning terms is whether two stations, as envisaged by the AAP, would provide sufficient PTAL uplift. In doing so, stations could be expected to attract sufficient patronage towards this sustainable form of public transport and make the planned development sustainable in transport terms.
- 2.2.1.4 Our assessment has concluded that two stations would be sufficient. The PTAL impact, based on two notional station locations approximate to the areas indicated in the OKR AAP, is shown in Figure 7. A fuller study by TfL has been composed and included in the TfL response to the AAP consultation. The study¹ concludes that the PTAL uplift of two stations in the OKR OA is sufficient to cover the densities the AAP plans to deliver on the proposal sites. The study also concludes that the Bakerloo line extension, along with committed schemes such as Surrey Canal Road and other improvements such as cycling infrastructure, bus frequency and priority measures, are sufficient to support the travel demand impacts of the new development and ensure they are sustainable.

¹ Old Kent Road Opportunity Area, *Strategic Transport Study*, TfL (2016) – this study has been included in TfL's response to the London Borough of Southwark Old Kent Road Area Action Plan public consultation held in 2016.

Figure 7 - PTAL impact of two new notional Bakerloo line stations in the Old Kent Road Opportunity Area



Old Kent Road - Opportunity Area

Public Transport Accessibility Levels (PTALs): 2031 High Growth scenario with BLE (OK224A323)

3 Identifying station location options

- 3.1.1.1 The Old Kent Road Opportunity Area context has been established by the AAP and TfL's strategic study of the AAP proposals, which demonstrates the case for considering two new stations in the Old Kent Road area. We have used the OKR AAP consultation responses to assist in establishing a range of options for the station locations along the Old Kent Road. The spatial scope for the Old Kent Road station options is greater than for other new stations on the extension at New Cross Gate and Lewisham. At these latter two locations, the aim is to facilitate interchange with the existing Rail stations and therefore the spatial scope of their siting is reduced by the existing fixed station infrastructure they must connect to.
- 3.1.1.2 On the basis of two new stations being assumed in the Old Kent Road area as a whole, we have split the OA in half and developed long lists of options for a station in the northern section and stations in the southern section. We have considered where there are large sites that tend to be commercial or open space, and also the proposals set out in the AAP and shown in Figure 3 to Figure 5. The rationale and description for each option mapped on figure is provided in Table 1.

Table 1 - Long list of station location options for northern area of Old Kent Road

Location	Location description	Rationale for consideration
A	At the Bricklayers Arms junction, potentially utilising the junction island	The location is frequently mentioned in the responses to the Southwark OKR AAP consultation.
B	Around the Lidl Supermarket site towards the northern end of Old Kent Road	Some responses in the Southwark OKR AAP consultation suggested an area to the north of the East Street to Burgess Park location the Borough suggested in their consultation. Some responses refer to this location having closer proximity to the existing high street in this location.
C	Dial a Ride depot	This is currently a site operated by TfL however the freehold is owned by Westminster Council. Given the existing use for transport operations and its location in the Mandela Way development area, the site has been considered.
D	On Mandela Way	The OKR AAP proposes a linear public park running as the spine in a major redevelopment area. The existing and future use and situation makes the site suitable for consideration.
E	Between Mandela Way and the Old Kent Road	The OKR AAP proposed Mandela Way as a major redevelopment area with new connections from this area to Old Kent Road via Hendre Road. This location is suitable to consider for serving this redevelopment area and the high street on Old Kent Road.
F	Tesco Superstore	The site is in the OKR AAP area and nearby two major redevelopment areas – Mandela Way and the Cantium Retail park area, as well as the large open space of Burgess Park.
G	Burgess Park	Although the site is outside of the OKR AAP, it is unoccupied and nearby two major redevelopment areas - Mandela Way and the Cantium Retail park area.
H	Glengall Road junction with Old Kent Road	This location is frequently mentioned by respondents to the OKR AAP consultation, on the basis that there is a open green space and its position closer to the mid point of the OA.

Table 2 - Long list of station location options for southern Old Kent Road area

Location	Location description	Rationale for consideration
I	Marlborough Grove and St James proposal site	This is a proposed site for redevelopment in the OKR AAP, and has been considered for a BLE station owing to its size.
J	Cantium Retail Park	The retail park is a proposed area for redevelopment and occupies an area close to Peckham Park Road junction which is frequently mentioned by respondents to the OKR AAP consultation.
K	Sandgate Street and Verney Road area	This is a proposed site for redevelopment in the OKR AAP, and has been considered for a BLE station owing to its size. The site also lies close to the junction with Rotherhithe New Road which is a location suggested in the OKR AAP consultation responses.
L	Gasometers	This is a proposed site for redevelopment in the OKR AAP and is current unoccupied excluding the gas holders. The site is also large and therefore has been considered for a BLE station.
M	Devon Street and Sylvan Grove area	This is a proposed site for redevelopment in the OKR AAP. The site is also large and therefore has been considered for a BLE station.
N	Toys R Us site	This site is a proposed site for redevelopment in the OKR AAP. The site is also large and therefore has been considered for a BLE station.

3.1.1.3 The sites selected have a comprehensive spread across the Old Kent Road area, considering many of the current and future residential areas and those locations suggested in the OKR AAP consultation feedback. The next section details how we have evaluated this long list of sites to reach a shortlist of options for assessment in more detail.

Figure 8 – Bakerloo line extension station options considered in northern half of Old Kent Road Opportunity Area

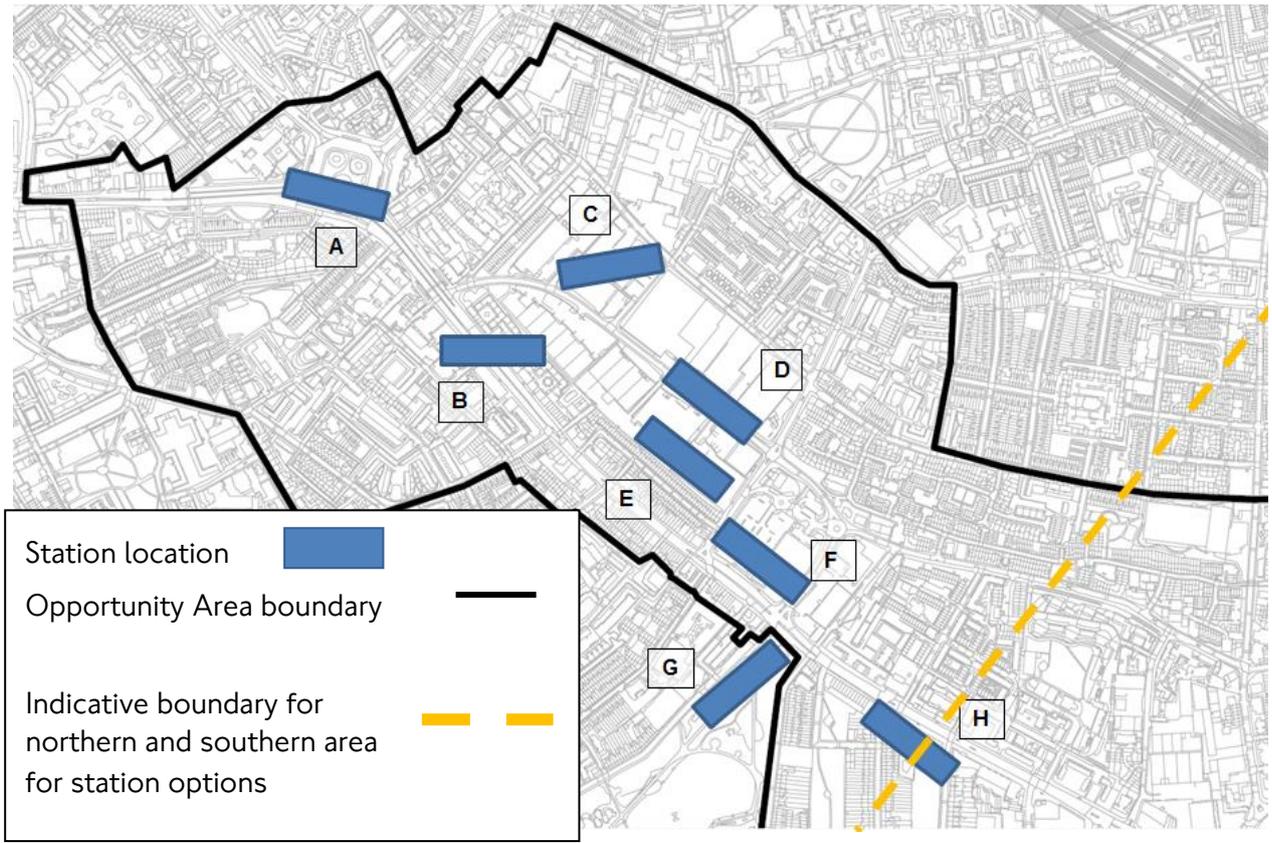


Figure 9 - Bakerloo line extension station options considered in southern half of Old Kent Road Opportunity Area



4 Establishing a shortlist of options

- 4.1.1.1 The location of each OKR station impacts the other. There is a balance to strike between the proximity of each station, including taking into account the existing Underground network. In planning policy terms, the proximity of a station to a site can impact its Public Transport Accessibility Level (PTAL)². The PTAL for a site then helps to determine whether a scale of development proposed is likely to be suitable given the sites travel demand impacts and what the PTAL measure states about the volume of public transport options that are within the site's catchment.
- 4.1.1.2 The PTAL measure uses a walking distance of 960 metres to a rail station as the threshold value however the closer a site is the better the PTAL score is likely to be as the walk access time to a station would be lower.
- 4.1.1.3 Constructing stations too close together can, subject to the size of local travel market each would serve, result in one or other being lowly used and potentially not providing a value for money investment. Stations situated too far away from one another can lead to long journeys to either one from the local area, worsening PTAL. A lower level of accessibility to public transport can lead to passengers taking motorised modes of travel that add to road congestion and would lengthen the door-to-door journey time for those passengers that do use the extension, reducing the benefits of the scheme.
- 4.1.1.4 The initial consideration of the station location options has entailed considering the impact of the options on the alignment between Elephant and Castle and the south east part of the OA where further station option locations are under consideration. The site size and existing and planned land use (with reference to the OKR AAP) has been considered as stations require significant areas of land for their construction. We have also considered the ability of a station to facilitate connections with the existing public transport network – particularly Buses in the case of the OKR OA.
- 4.1.1.5 Alongside these connections, we have also considered the walking catchment of the station locations as enabling passengers to be able to walk to stations will be an indication of how well a community is served and help boost active travel and reduce pressure on the existing transport network.
- 4.1.1.6 Undertaking these connections will enable identification of a shortlist of options that we will assess in more detail to ensure they support planning policies and the delivery of a new part of the public transport network that is an affordable and effective.

² See <https://data.london.gov.uk/dataset/public-transport-accessibility-levels> for more information on PTALs including the calculation methodology

4.2 Option A – Bricklayers Arms

- 4.2.1.1 A station at Bricklayers Arms is assumed to be located at the road junction, serving the local communities in the surrounding area (rather than the former rail sidings that shared the name and are now occupied by business warehouses and transport depots on Mandela Way).
- 4.2.1.2 We are developing options for simplifying the junction and removing the viaduct that currently causes severance through the area. At this point there is no committed funding or preferred option, and therefore our work assumes the utilisation of the existing junction island. However it is important to note that the Bricklayers Arms study TfL has been undertaking has demonstrated that there are substantial utilities running under the site from Old Kent Road to Great Dover Street, associated with telecoms, gas and water.
- 4.2.1.3 Benchmarking against the existing Tube network has been set out in some consultation responses. As set out in Table 3, across inner London there is substantial difference on the existing Tube network. There is no single standard or best practice example to apply to stations along the BLE. The unique characteristics and local conditions such as the wider transport network and the existing and planned development that generates demand are therefore the key considerations we will make.

Table 3 - Interstation distances on the existing network and for assumed station location A

Location	Station section	Inter-station distance (km)
Jubilee	Southwark to London Bridge	1.25
Jubilee	London Bridge to Bermondsey	1.93
Jubilee	West Hampstead to Finchley Road	0.61
Victoria	Stockwell to Brixton	1.77
Victoria	Vauxhall to Stockwell	1.46
Victoria	Seven Sisters Finsbury Park	1.93
Northern	Belsize Park to Chalk Farm	1.11
Northern	Chalk Farm to Camden Town	0.85
Bakerloo line extension	Assumed Bricklayers Arms to Elephant and Castle	0.96

4.2.1.4 The approximate walk catchment for option A is shown in Figure 10 along with the catchments of the existing Tube stations nearby the Old Kent Road – specifically Elephant & Castle, Borough, Bermondsey and Canada Water. The location therefore has approximately two stations on two Tube lines (Northern and Bakerloo) within a walkable distance. This is in comparison to large sections of the Old Kent Road OA, which as figure 9 demonstrates do not fall within the catchment of the Underground network.

4.2.1.5 Given the location of Bricklayers Arms and its locale inside Tube station catchment areas, and the existing bus network that runs between Great Dover Street, New Kent Road, Tower Bridge Road onto Old Kent Road, the PTAL for the area is already in the high region. This is in contrast to the rest of the OA where many sections have PTALs in the lower half of the metric with values of 3 and under, including in the northern area of the OA where there are both existing communities such as the eastern part of the Aylesbury estate and also major redevelopment sites identified in the OKR AAP.

Figure 10 - Estimated walk catchment area of station location option A Bricklayers Arms Junction

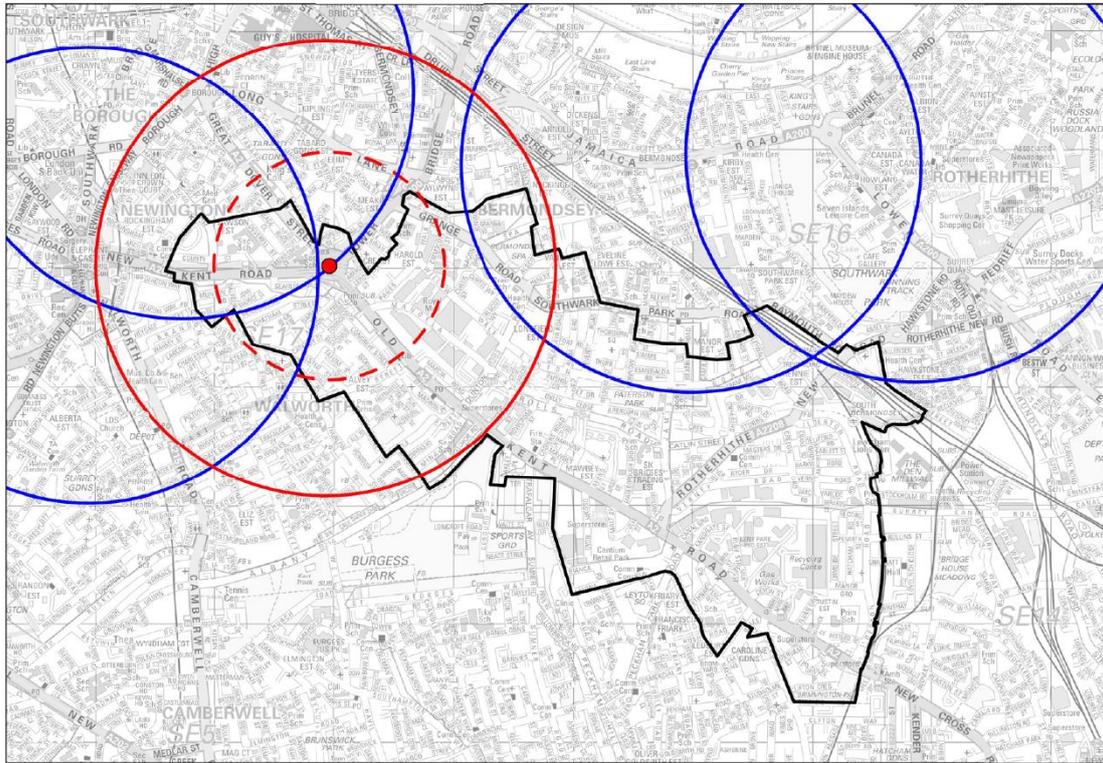
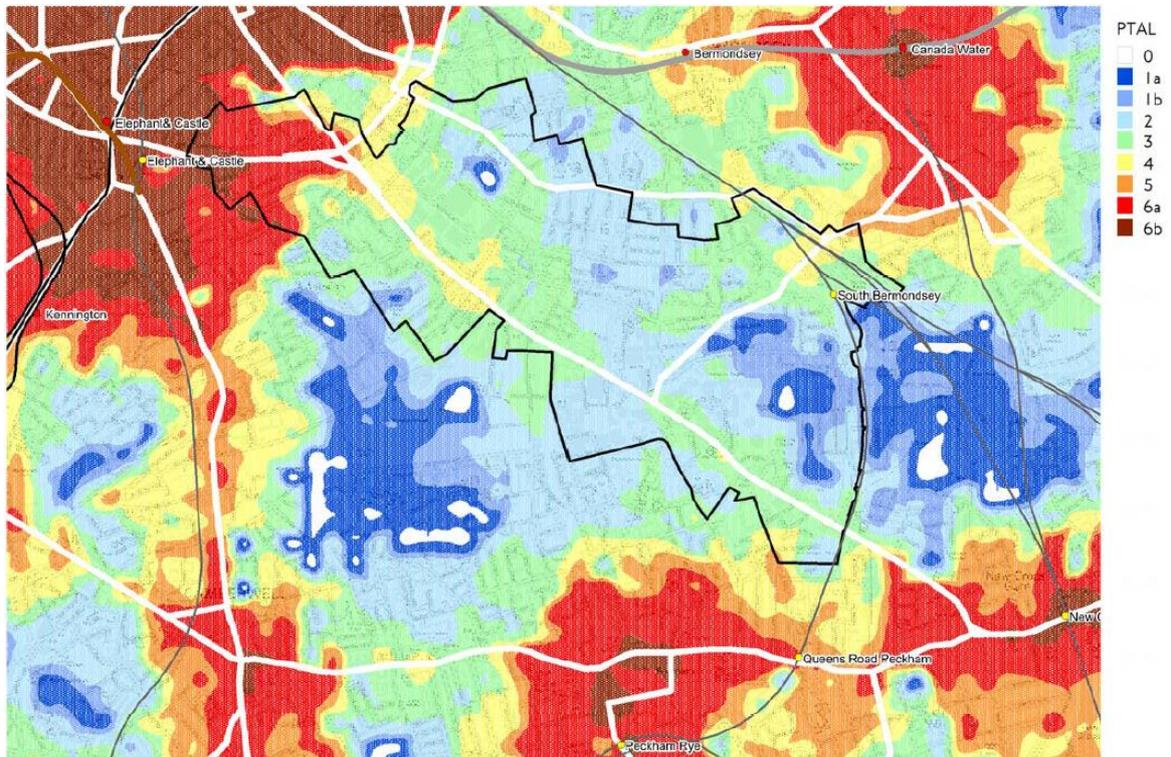


Figure 11 - Current PTAL levels in the Old Kent Road OA

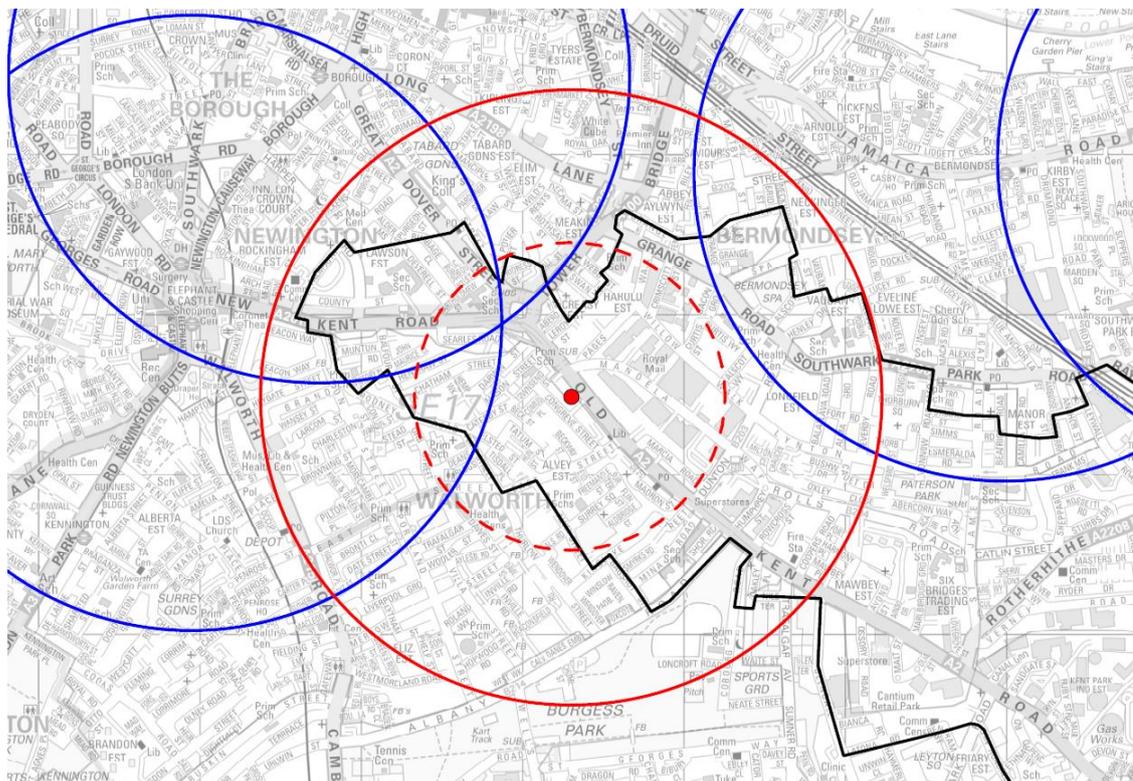


- 4.2.1.6 The PTAL for the area is already in the high region (a score of 6a – the second highest score available) as the option site and its locale falls inside Tube station catchment areas and is also served by a range of bus routes. This is in contrast to the rest of the OA where many sections have low PTALs of values of 3 and under. The northern area of the OA where there are both existing communities such as the eastern part of the Aylesbury estate and also major redevelopment sites identified in the OKR AAP, are included in these lower levels.
- 4.2.1.7 These factors suggest that a station to serve the north end of the Old Kent Road area would be better located further south along its length, and not where it ends at the northern end at Bricklayers Arms road junction. Alternate options in these areas to the south could still leave the Bricklayers Arms locale in the new BLE station catchment area – see further options B to F, increasing the range of options for Bricklayers Arms to the Tube to three stations.
- 4.2.1.8 The site available at Bricklayers Arms is approximately 6,000 sqm in size. The desirable minimum site size for a new Underground station during construction is 10,000 sqm. The site is therefore substantially undersized and therefore to construct on the site would be highly complex and could substantially increase the time to construct, the risks during construction and the overall cost of the option relative to other sites with fewer constraints. This small site size is further complicated by the existence of the numerous utilities running through the site.
- 4.2.1.9 Overall there is not a compelling case for option A to be progressed. The site is undersized and carries significant risks and complexities. The site is also within existing Tube station catchment areas for serving the existing communities and located away from the new development and existing communities in the Old Kent Road that have much lower levels of PTAL.

4.3 Option B – Lidl Supermarket Site

- 4.3.1.1 Station option B site at Lidl Supermarket is in an area at the north end of where the current high street begins, running south, on the Old Kent Road. It is close by to East Steet – one of the major east-west links between the East Walworth / Aylesbury / Heygate areas to the Old Kent Road.
- 4.3.1.2 Based on the OKR AAP proposals, the site, whilst a designated proposal site for new development, is not itself part of major redevelopment area. The main cluster of proposed new development in the AAP is to the north east across the Old Kent Road in the Mandela Way area.
- 4.3.1.3 The station catchment extends further down the Old Kent Road than option A – see Figure 12, whilst still overlapping with the catchment of Elephant & Castle in particular. However there is potential for large parts of the OA in the northern area to remain less well served.

Figure 12 - Estimated walk catchment area of station location option B Lidl Site

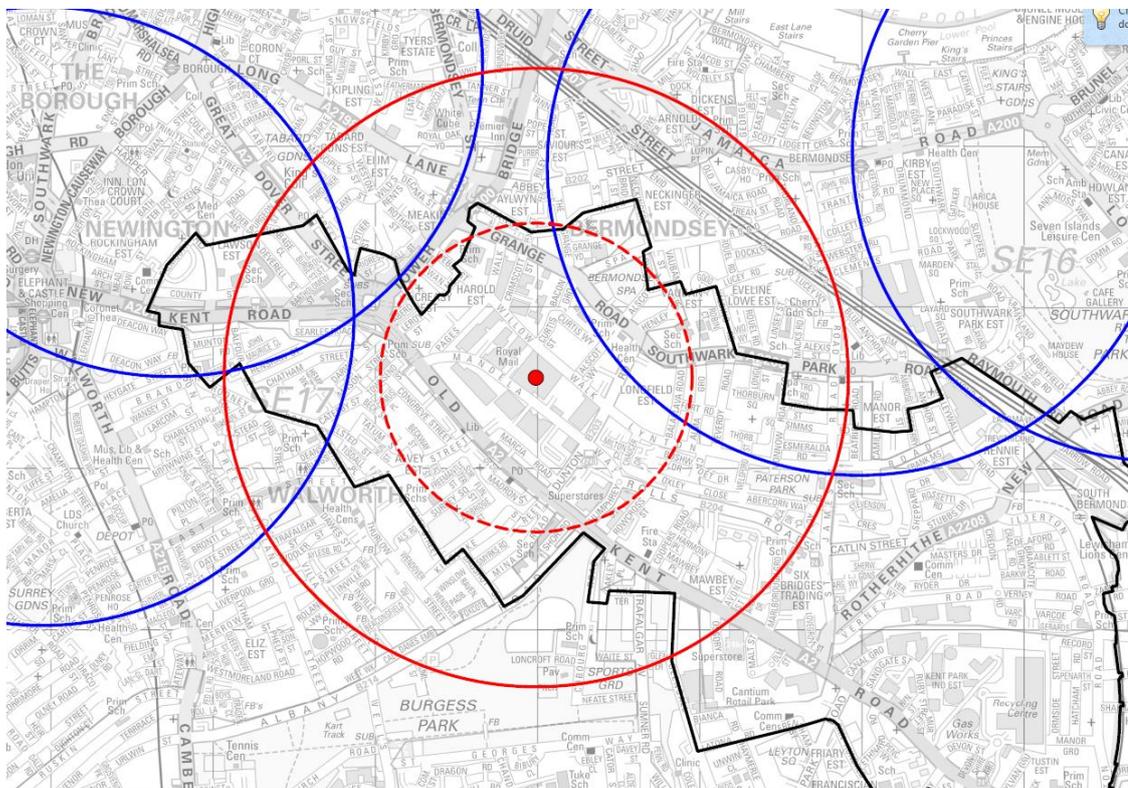


- 4.3.1.4 The site is insufficiently sized to enable the station to be constructed fully on the site - the station would likely need to extend under the Old Kent Road and the Peabody residential properties on the east side of there, or under Congreve St and the residential properties on the west side of there. These factors are likely to increase the complexity, risks and costs of this option relative to those on larger sites, making it less preferable.
- 4.3.1.5 The location of the station is also not suitable for the potential alignment route to the existing overruns tunnels as the alignment would need to swing back towards a north easterly direction in order to reach the site, which in turn leads it pointing away from the Old Kent Road. To return to the southern end of the Old Kent Road would require a very long route which would reduce the benefits on the extension as passenger journeys would take longer and could cause fewer people to choose the Underground for travel. The longer route would also cost more and so overall the station option could lower the value for money obtained from the major investment in the extension.
- 4.3.1.6 The site is slightly better for a route via the Old Kent Road, as the alignment would not need to deviate on the south / eastbound approach to the station. However given the expected orientation of the station on the site considered, it may still require a less direct route to reach the central and southern parts of the OA, and therefore is less optimal than other locations considered.
- 4.3.1.7 Access to Buses on the Old Kent Road, the main current public transport option in the area, is good for northbound services, with existing bus stops just to the south of the site. For Buses operating southbound however there is severance due to the end of the Bricklayers Arms flyover and the dual carriageway in both directions. This could be overcome through the addition of a second station entrance on that side of the Old Kent Road, though space may be limited given the existing substantial residential mansion blocks with basements close to the road edge.
- 4.3.1.8 Overall the site is not planned for further consideration given that it has a poor fit with the potential alignments to Elephant and Castle and given that the site is relatively small and may require a more complex and costly approach to delivering a suitable station.

4.4 Option C – Dial-a-Ride & DPD Depot

- 4.4.1.1 The site entails is partly operated by TfL for the purpose of the Dial-a-Ride depot for central London fleet services and the control centre for London-wide services. The majority of the site is operated as a DPD company depot for the distribution of parcels.
- 4.4.1.2 The site lies in a major redevelopment area and the catchment is particularly focused on this immediate area. The site would therefore provide very quick and easy access to the Mandela Way development area as set out in the OKR AAP, including the AAP Crimscott Street and Pages Walk designated sites on the north side of Willow Walk. In the wider catchment are other AAP proposed development sites whilst the north and north east part of the OA towards Bermondsey is covered along with Burgess Park and parts of East Walworth.

Figure 13 - Estimated walk catchment area of station location option C Dial-a-Ride & DPD site



- 4.4.1.3 The site size is substantial, with the combined two current land uses occupying a site of circa 15,000 sqm. This is substantially above the desired minimum size of 10,000 sqm and therefore could facilitate a simpler and less complex station construction than other options, helping to reduce risks and likely costs.
- 4.4.1.4 The station construction at this site would need to take place prior to the proposed redevelopment based on the AAP plans and therefore could delay delivery of development here. The station would need to make provision for substantial over site development proposals. These factors increase the risks associated with delivery of the station but, if programmed with the wider

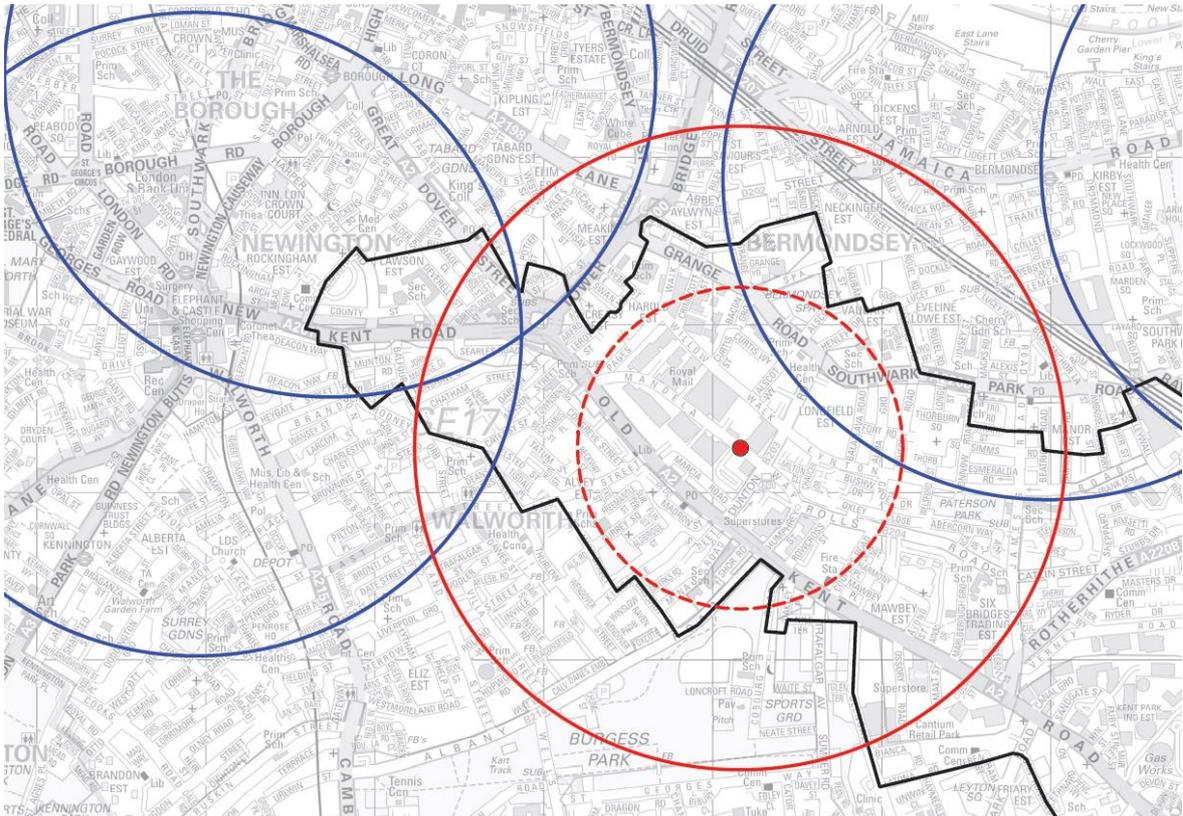
masterplan for the Mandela Way development area, should be manageable to have low impact.

- 4.4.1.5 It should be noted however that the freeholder of the site, Westminster Council, has served notice on TfL to vacate the Dial-a-Ride site along with Go-ahead who operate a Bus garage to adjacent southeast of Dial-a-Ride's depot. Westminster Council plans the site for the purpose of waste management facilities. This current planned land use and the timescales for its construction would be prior to the planned BLE station construction. There is therefore significant uncertainty about the availability of the site and its land use by the time BLE construction would start and therefore it undermines the suitability of the site for further consideration relative to other options with lower risks of this nature.
- 4.4.1.6 The station site is similar to option B, slightly further north. The location of the station is therefore also not suitable for the potential alignment route to the existing overruns tunnels as the alignment would need to swing back towards a north easterly direction in order to reach the site, which in turn leads to it pointing away from the Old Kent Road. To return to the southern end of the Old Kent Road would require a very long route which would reduce the benefits on the extension as passenger journeys would take longer and could cause fewer people to choose the Underground for travel. The longer route would also cost more and so overall the station option could lower the value for money obtained from the major investment in the extension.
- 4.4.1.7 The station site is also relatively poorly positioned for interchange with the main public transport options in the area – Buses. Buses are concentrated on Old Kent Road, with some services terminating on Dunton Road. This station location is set away from both of those locations. Furthermore, the AAP proposals and vision for the future of this area is not conducive to significant diversion of the bus network through the Mandela Way area, as the road network will be become focused on local traffic and servicing of future development, alongside a major new park.
- 4.4.1.8 To conclude the site will not be considered further owing to the location impact on the alignment options to Elephant and Castle that we are currently considering and due to the uncertainty and risks associated with the current planned land use and timescales from the freeholder of the site.

4.5 Option D – On Mandela Way highway

- 4.5.1.1 Mandela Way is a borough highway, serving the current industrial estate. Based upon the OKR AAP proposals, the Mandela Way estate is envisaged to become a major development area, focused on a new commercial district with densification of employment. As part of the outline vision, the OKR AAP has indicated that the current highway that forms the spine of the redevelopment area could become a large new public park, providing pedestrian and cycling routes alongside a more local road compared to the current main road function that Mandela Way provides.
- 4.5.1.2 The site's location is well situated for serving the main new development areas in this part of the OA, with Mandela Way, Crimscott Street and Pages Walk and the Tesco / Southernwood Retail park proposed development sites in the AAP all falling within the more immediate catchment area (covered by the 480 metre dashed area from the station in Figure 14). The location also serves the existing communities to the north of the area into the southern part of Bermondsey, and also on the western side of Old Kent Road in the east Walworth area.
- 4.5.1.3 The station site could junction with Dunton Road, where some bus services start and finish, providing a degree of bus interchange and so an improvement over option C in particular. However there remain a number of bus services operating on Old Kent Road that would not provide a direct / close interchange to the station in this location. The station would also be away from the main pedestrian activity on the Old Kent Road itself which may reduce the usage of it, although the station would provide a service direct to the new commercial development in this area.

Figure 14 - Estimated walk catchment area of station location option D on Mandela Way



- 4.5.1.4 To construct a station in this site would require a site size greater than the current Mandela Way highway. The site could be elongated to utilise much of what is currently highway but the site would nonetheless required land take on both sides of the highway into the occupied sites. Therefore, any perceived benefit of the notion of delivery using public highway and not impacting directly privately owned land is not achievable in practice. It is not currently clear whether the planned green park proposed in the OKR AAP would be of sufficient size. Nonetheless, constructing a station on the park site would require its removal and the loss of the amenity it would provide – the AAP plans to provide the park to ensure the planned new population growth has sufficient green space.
- 4.5.1.5 The impact of the option on the route alignment is more favourable for both potential route options to Elephant and Castle compared to options A to D. The option has little impact on the route option via New Kent Road whilst for the route option via the existing overrun tunnels, the alignment would require lengthening and so higher cost, but should be able to meet a station on the site oriented towards the southeast end of the OA, helping to generate a more direct alignment for quicker journeys to the next station.
- 4.5.1.6 Overall there are strengths with the site concerning how well the walking catchment covers the major development areas but also existing communities in the OA. The option is also considered to accommodate the alignment options to Elephant and Castle and support a relatively more efficient route down the Old Kent Road compared to options A to C. There are some weaknesses to the site

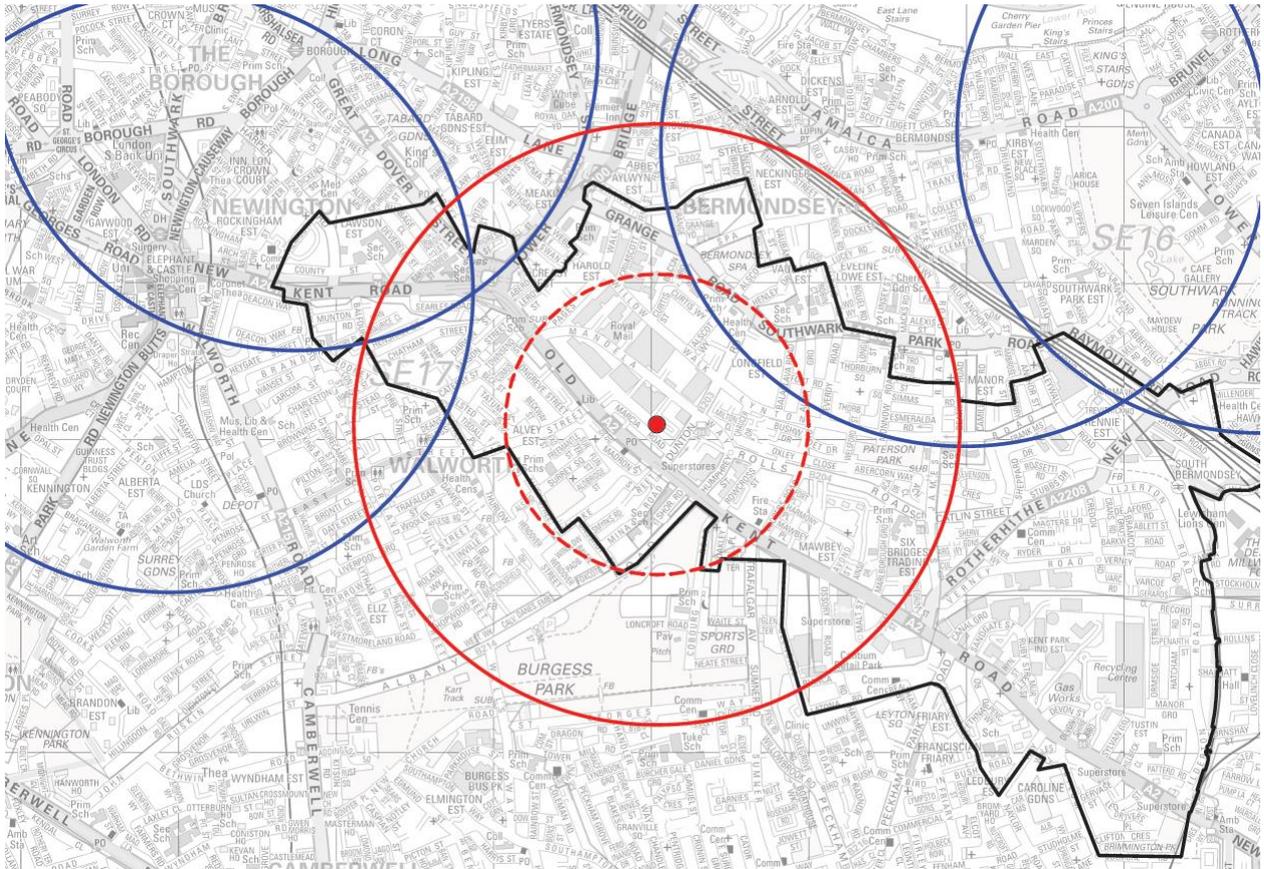
such as the effectiveness of the interchange with existing bus services and the way-finding to the station from the main pedestrian route on the Old Kent Road. The option is further set back from these areas compared to alternatives.

- 4.5.1.7 Given the weaknesses of the site option are relatively higher compared to other options such as E and F, such as the proximity to Old Kent Road and the main pedestrian routes and wider transport network connections there and the potential impact on the local road network or possible planned park (as envisaged in the AAP) during construction, this option is not considered further in the shortlist stage.

4.6 Option E – Between Mandela Way and the Old Kent Road

- 4.6.1.1 The option would utilise sites currently occupied by a range of companies in warehousing on the south side of Mandela Way. Immediately to the south of the site is a residential road with terraced properties that share a rear boundary with the site. Utilising the site would impact multiple occupants and freeholders.
- 4.6.1.2 The site size is circa 20,000 sqm – a substantial size making construction of the site less complex and enabling a cut and cover station box to be delivered, helping to reduce costs relative to other sites. It may also be the case that the entire site is not required for construction, potentially releasing some of the land for the AAP proposals to be delivered prior to completion of the station construction.
- 4.6.1.3 The site's location is well situated for serving the main new development areas in this part of the OA, with Mandela Way, Crimscott Street and Pages Walk and the Tesco / Southernwood Retail park proposed development sites in the AAP all falling within the more immediate catchment area (covered by the 480 metre dashed area from the station in Figure 14). The location also serves the existing communities to the north of the area into the southern part of Bermondsey, and also on the western side of Old Kent Road in the east Walworth area.

Figure 15 - Estimated walk catchment area of station location option E between Old Kent Road and Mandela Way



4.6.1.4 The station construction would need to take place prior to some of the proposed redevelopment on the site based on the AAP plans, and therefore could delay delivery of development here. The station would need to make provision within its infrastructure for substantial over site development proposals. These factors increase the risks associated with delivery of the station but, if programmed with the wider masterplan for the Mandela Way development area, should be manageable to have low impact.

4.6.1.5 Similar to option D, the station site could junction with Dunton Road and also provide an entrance closer to Old Kent Road via a subway under the residential and commercial properties between the station on Marcia Road and Old Kent Road. This would enable the option to achieve improved interchange with Buses compared to option D, and provide a clear route from the main pedestrian corridor on Old Kent Road into the Tube. However whilst better for way finding, the actual access time would still be longer due to time spent travelling through the subway before reaching the station platforms.

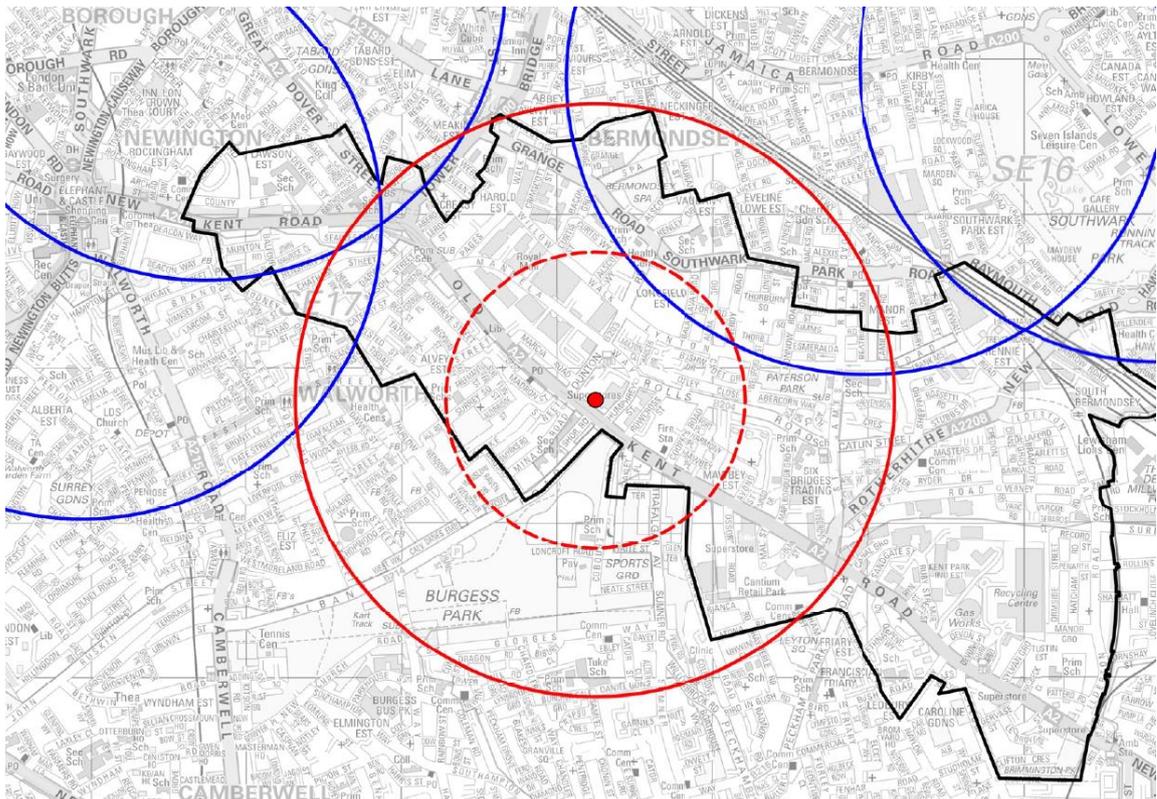
- 4.6.1.6 It should be noted however that the main bus stopping area is by the Tesco site owing to the wider road widths allowing for inset bus bays to accommodate the high volume of stopping services. Hence having an entrance on Old Kent Road parallel to Marcia Road is likely to require bus passengers to cross the road (either across the Old Kent Road or across Dunton Road depending on the bus they alight from).
- 4.6.1.7 The impact of the option on the route alignment is more favourable for both potential route options to Elephant and Castle compared to options A to D. The option has little impact on the route option via New Kent Road whilst for the route option via the existing overrun tunnels, the alignment would also be shorter than options A to D. and should be able to meet a station on the site oriented towards the southeast end of the OA, helping to generate a more direct alignment for quicker journeys to the next station.
- 4.6.1.8 In summary, the option is relatively better performing than options A to D. Option E owing to its site size, location and relatively lower impact on the alignment options under consideration will be further considered in the shortlist assessment.

4.7 Option F – Tesco Superstore

- 4.7.1.1 The site would occupy a Tesco Superstore site, which comprises the store itself, a large car park and a petrol station operated by the supermarket in the north west corner of the site.
- 4.7.1.2 The site size is circa 20,000 sqm. This offers significant space for construction of a station that should help to increase flexibility and reduce risks and costs as a cut-and-cover station box construction could be delivered. Given the site size, it may be that the entire site may not be necessary for station construction. This may therefore enable the current site use to be retained to enable the current occupant Tesco to provide a store / petrol services to the local area if required and supported by planning policy.
- 4.7.1.3 The catchment of Option F achieves a good balance between the existing and planned new communities and also given the existing catchments of other Underground stations to the north. As Figure 16 demonstrates, areas such as Bricklayers Arms junction, Mandela Way, Crimscott Street and Pages Walk, the Cantium Retail Park development area, and those either side of Rotherhithe New Road, all fall into the catchment.
- 4.7.1.4 A large part of Burgess Park, the Aylesbury Estate and the north Camberwell area fall into the catchment of the station. The catchment also avoids substantial overlap with existing stations, particularly those at Elephant & Castle and Borough.
- 4.7.1.5 Proximity to the existing Bus network and their main stopping points is good, with the station located alongside the main southbound bus stops at this part of the Old Kent Road, and also able to link to those services that terminate and start on Dunton Road alongside the north west end of the station site. As with Option E, it is possible that a subway entrance to the station could be provided – for Option F this could be located on the south side of Old Kent Road removing the need for pedestrians and bus passengers to cross the busy road junction, and also directly serving the Park which may be helpful for serving events traffic. The station site and its size may provide the scope for further improving the bus interchange without needing to change bus routings along the Old Kent Road relative to options A to E.
- 4.7.1.6 The impact of the option on the route alignment is more favourable for both potential route options to Elephant & Castle compared to options A to E. The option has little impact on the route option via New Kent Road whilst for the route option via the existing overrun tunnels, the alignment would also be shorter than options A to E. The alignment should be able to meet a station on the site oriented towards the southeast end of the OA, helping to generate a more direct alignment for quicker journeys to the next station.

4.7.1.7 Overall the option has a number of strengths compared to options A to E, noting those weaknesses identified above, with alignment and proximity to the Old Kent Road main bus corridor for interchange and pedestrian traffic considered the best performing of those options discussed so far. The site size is similarly large as options C and E. Option F will therefore be considered in more detail in the shortlist assessment.

Figure 16 - Estimated walk catchment area of station location option F on Tesco site

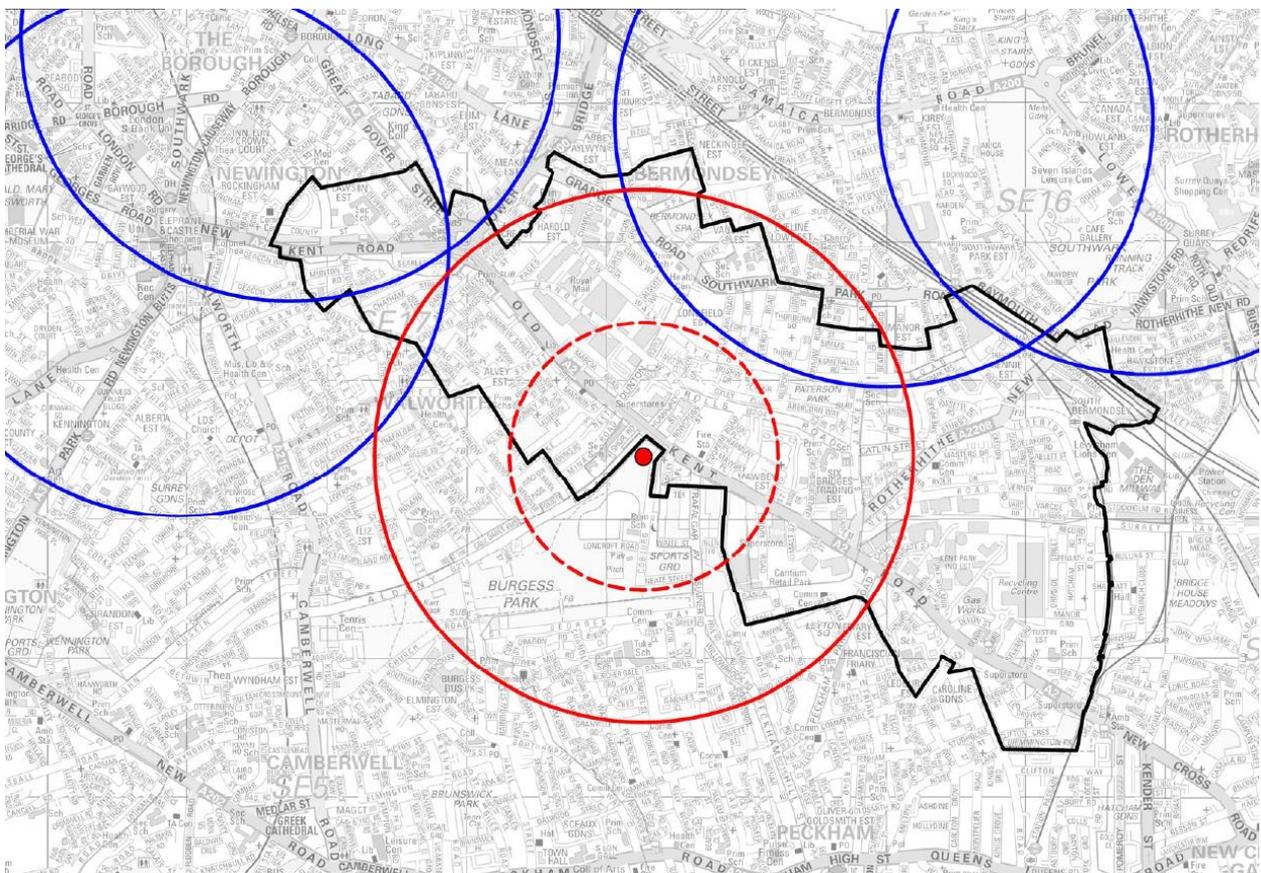


4.8 Option G – Burgess Park

4.8.1.1 The site would occupy the north corner of Burgess Park near the main entrance from the Old Kent Road. Burgess Park is designated as Metropolitan Open Land which indicates that it provides a strategic function in the provision of open land in London and is considered to be equivalent to the Green Belt designation elsewhere in the country. The land use is therefore highly sensitive and it would likely be deemed unnecessary to reduce MOL given the sites available for redevelopment in close vicinity as set out in the OKR AAP.

4.8.1.2 Whilst the site's catchment, as shown in Figure 17 is equivalent to Option F's in terms of the effectiveness of its coverage of both existing and future communities from new development, there are several key weaknesses to the site.

Figure 17 - Estimated walk catchment area of station location option G in Burgess Park



4.8.1.3 The park narrows in the northern corner, and the site option would entail a station construction that would effectively occupy the main entrance from the Old Kent Road, significantly impact the ease of access to the park for the Old Kent Road area. There is little flexibility to move the station site owing to the water course in the park, and given that to do so will cause the station to lose its proximity to the main active area of the Old Kent Road. This would similarly deteriorate the ease of

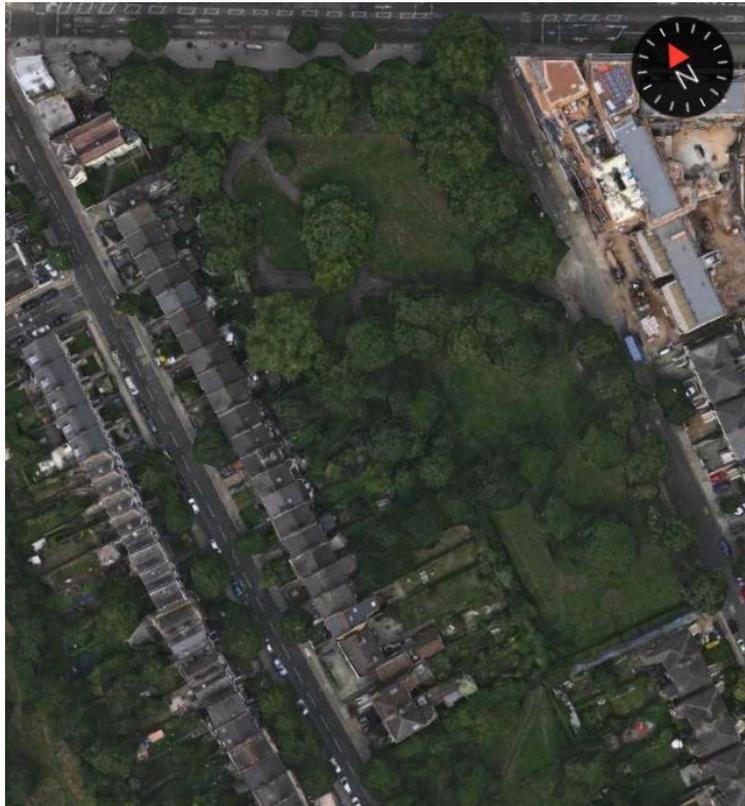
access to and from it for passengers interchanging with the bus network on the Old Kent Road.

- 4.8.1.4 The alignment of the extension would be adversely impacted by the option. To achieve the site at that point in the park would require a station broadly oriented south west to north east. This option would therefore significantly lengthen the alignment in the Old Kent Road and for journeys towards Elephant and Castle and towards New Cross Gate or a second station on Old Kent Road. The alignment would need to undertaken long curvatures to return from the opposing south west to north east axis to the required north west to south east axis for the reaching the remainder of the OA and New Cross Gate.
- 4.8.1.5 In conclusion, aside from option G's potential catchment, the site has relatively poor performance on all other aspects compared to other stations considered. The station site has therefore not been considered any further.

4.9 Option H – Glengall Road junction with Old Kent Road

4.9.1.1 The site is a proposal from OKR AAP consultation feedback. Some respondents to the consultation highlighted that there is public open space that they felt was a suitable location to deliver a station. A check of the site designation in Southwark's local policy indicates that the site is classed as MOL, and may be so due to it likely having been formerly part of a larger Burgess Park, with some infill development having been undertaken in the late 19th and early 20th century. The site is shown in Figure 18 owing to the difficulty of clearly seeing it in Figure 19.

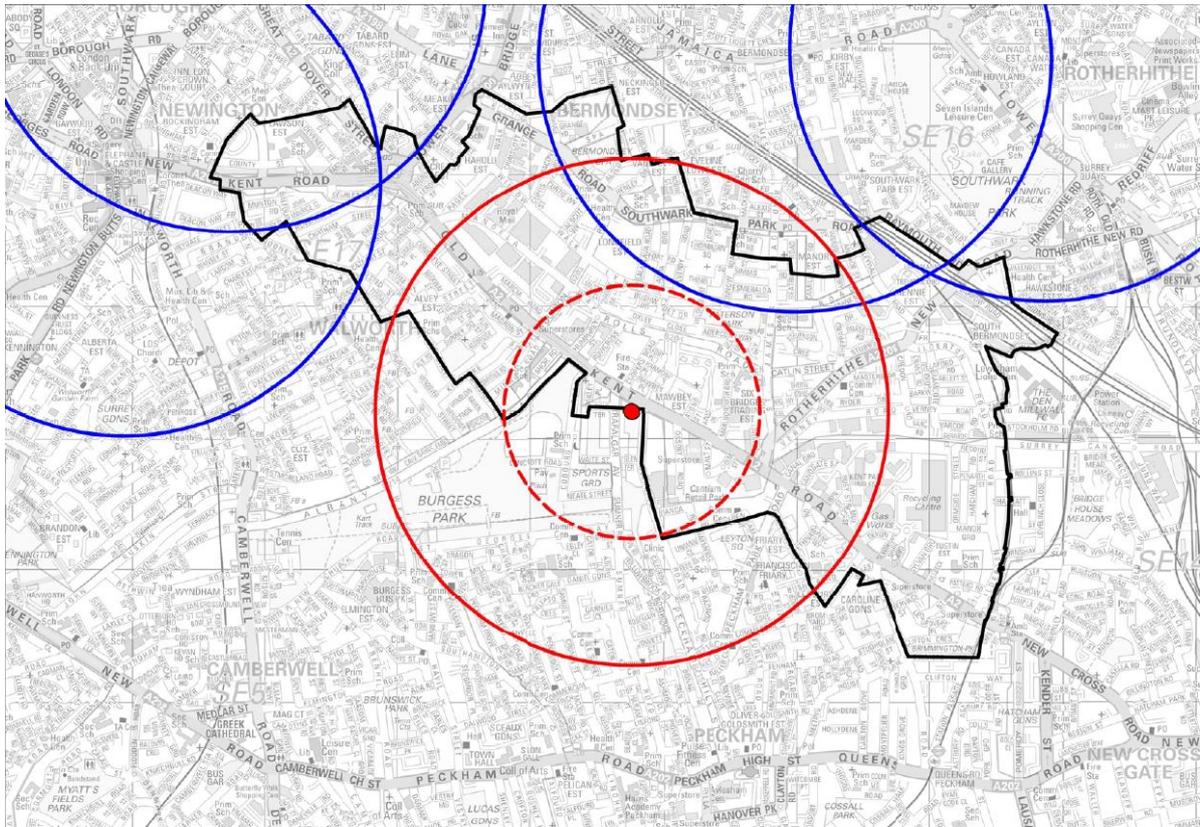
Figure 18 - Parkland by Glengall Road identified for station option H



Source: Apple Maps

- 4.9.1.2 The site size is relatively small at circa 8,000 sqm – below the minimum desirable site size for understanding station construction. In addition, the site width means that a station box would not fit on a east-west alignment through a cut and cover construction. To achieve a cut and cover box that is on an alignment to serve the south eastern part of Old Kent Road and New Cross Gate would require demolition of residential properties on Glengall Road and Trafalgar Avenue. Alternatively the station box could be excavated from under these properties; however this would increase the complexity, risks and costs of the station.
- 4.9.1.3 Orienting the station on a north-south alignment, similar to option G, would results in significant deterioration of the extension alignment and reduce the benefits of the investment in the extension as journey times would be significantly longer than compared to the achievable route alignment for other station options.
- 4.9.1.4 The station catchment in Figure 19 covers much of the north part of the OA, however is it notable that a station in this location would see Bricklayers Arms junction (and what is a proposal site in the OKR AAP) fall outside of that cathment along with parts of the Mandela Way and the Crimscott Street and Pages Walk development sites. At the same time, the station catchment does not offset these missed areas by covering all the areas to the south of the OA. Therefore, as either a first or second station on the Old Kent Road, the location can be considered too central and risk leaving some parts of the OA outside of the BLE catchment.
- 4.9.1.5 In terms of connections with the wider transport network, the site is relatively good, with a situation on the Old Kent Road helping it serve the high pedestrian flows and the bus services stopping along its length. However despite this strength, the site overall has some weaknesses as covered and therefore the site is not planned for further consideration.

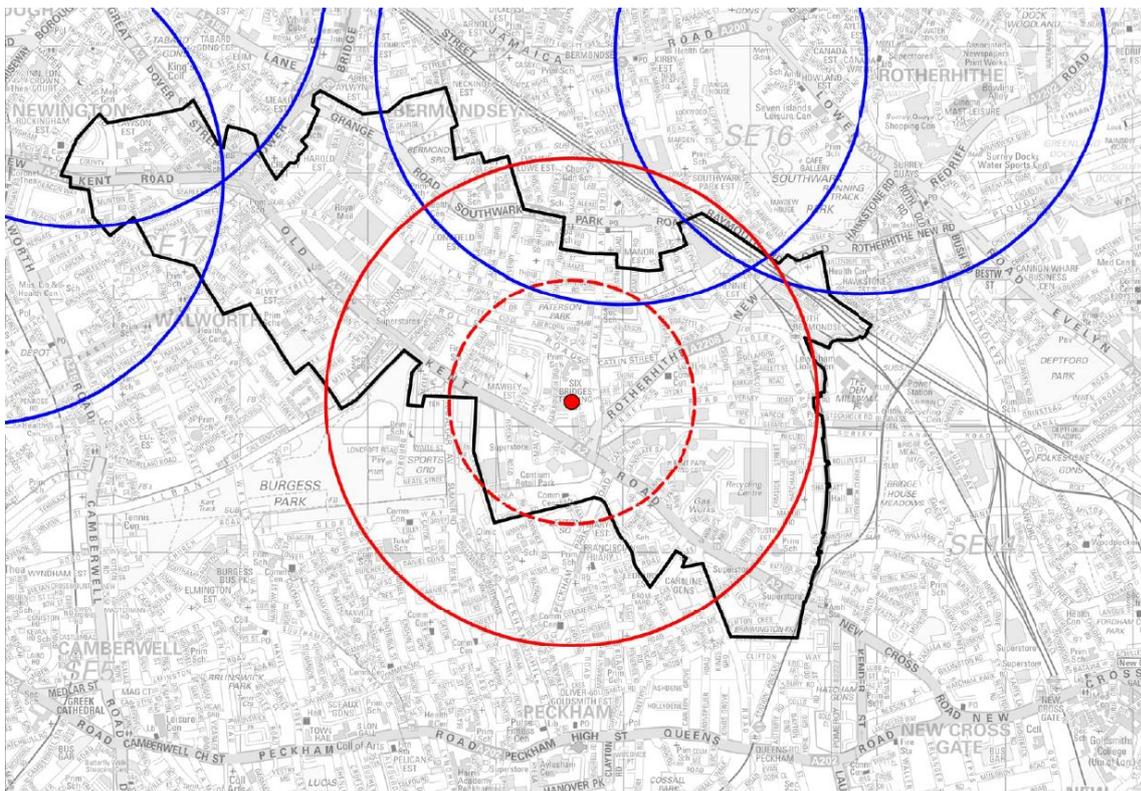
Figure 19 - Estimated walk catchment area of station location option H by Glengall Road



4.10 Option I – Marlborough Grove and St James proposal site

- 4.10.1.1 The site for option I covers an industrial estate with multiple warehouse and retail units in an area known as the Six Bridges Trading Estate and also as Marlborough Grove and St James proposal site in the OKR AAP.
- 4.10.1.2 Overall site is very large circa 40,000 sqm. Therefore the station site itself would occupy around a quarter to half of the site. In general the station site assumed is to the southern end of the trading estate for proximity to the Old Kent Road and given the range of shortlist options under consideration in the Mandela Way area.
- 4.10.1.3 This site could be considered as a second station on the Old Kent Road, and this is reflected by the catchment area of the station shown in Figure 20, which extends to cover most of the central and south areas covered by the OKR AAP in the OA.
- 4.10.1.4 It should be noted however that the catchment does not extend fully to the south east corner of the OA boundary, leaving a significant potential development site identified in the OKR AAP – the Aldi Supermarket site, outside of the catchment of this station location option. The site would also significantly overlap with the shortlisted options for stations in the northern part of the OA already described. This overlap and consequential greater distance from all parts of the south east end of the OA could reduce the station’s benefits and use by passengers, reducing the value for money from the investment in the station location.

Figure 20 – Estimated walk catchment area of station location option I at Marlborough Grove and St James OKR AAP proposal site



- 4.10.1.5 The station site could sit within the proposed development area, relying on future new streets and links to Rotherhithe New Road and Old Kent Road to provide pedestrian connections with the majority of bus services in the area. Alternatively it could be possible to site the station closer to Old Kent Road – the main bus corridor to achieve quicker interchange between the extension station and bus services, as well as serving this main pedestrian corridor in the OA.
- 4.10.1.6 The location of option I supports an efficient alignment for connecting with New Cross Gate and the northern area of Old Kent Road where a station is assumed to be located.
- 4.10.1.7 Overall the station site is not planned for further assessment as there are alternative locations which provide more complete catchment of the OA and the development sites in the southern and central areas. These alternative options similarly match the strengths of this site option.

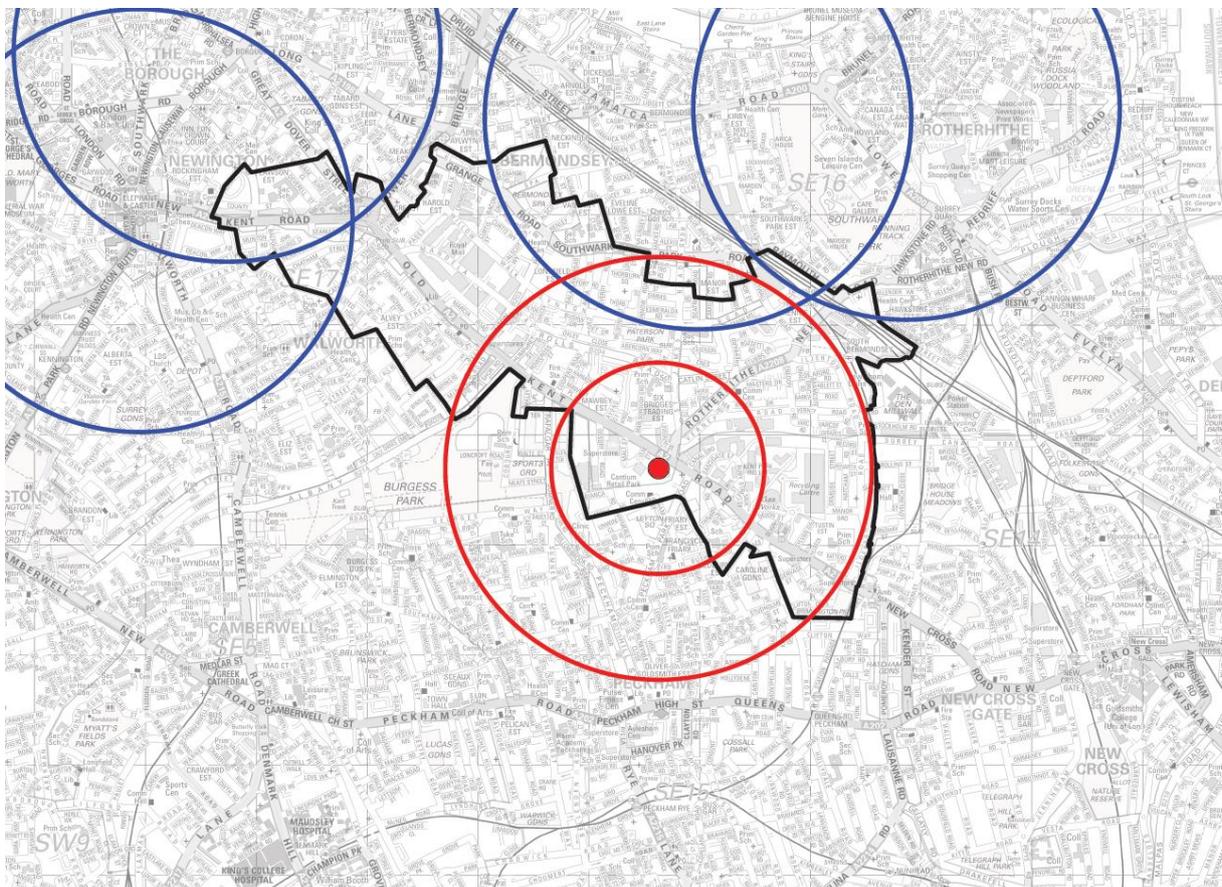
4.11 Option J – Cantium Retail Park site

4.11.1.1 The site is on an existing retail park, on the south side of Old Kent Road close to the junction of that road with Rotherhithe New Road. Based upon the OKR AAP proposals, the site itself is a planned redevelopment area, and is planned to also include a major new public linear park running between Burgess Park to the west and across through option J site on to north east in areas across Old Kent Road.

4.11.1.2 The site is circa 16,000 sqm and therefore sufficient to enable delivery of a cut and cover station. Lying across the area of a planned new linear park, there is a risk that the station construction, if programmed later than the delivery of the new park, could result in significant disruption to that proposal for a number of years whilst the station is constructed.

4.11.1.3 The site catchment shown in Figure 21, just reaches the edges of the south eastern end of the OA – development areas and the remainder of the Old Kent Road as it runs through Lewisham are therefore still with a near 1 km travel distance to the Tube. The catchment would also substantially overlap with a station to serve the north western end of the OA. The catchment, on the southern side of Old Kent Road extends south into the Peckham area serving local communities there.

Figure 21 - Estimated walk catchment area of station location option J at Cantium retail park OKR AAP proposal site

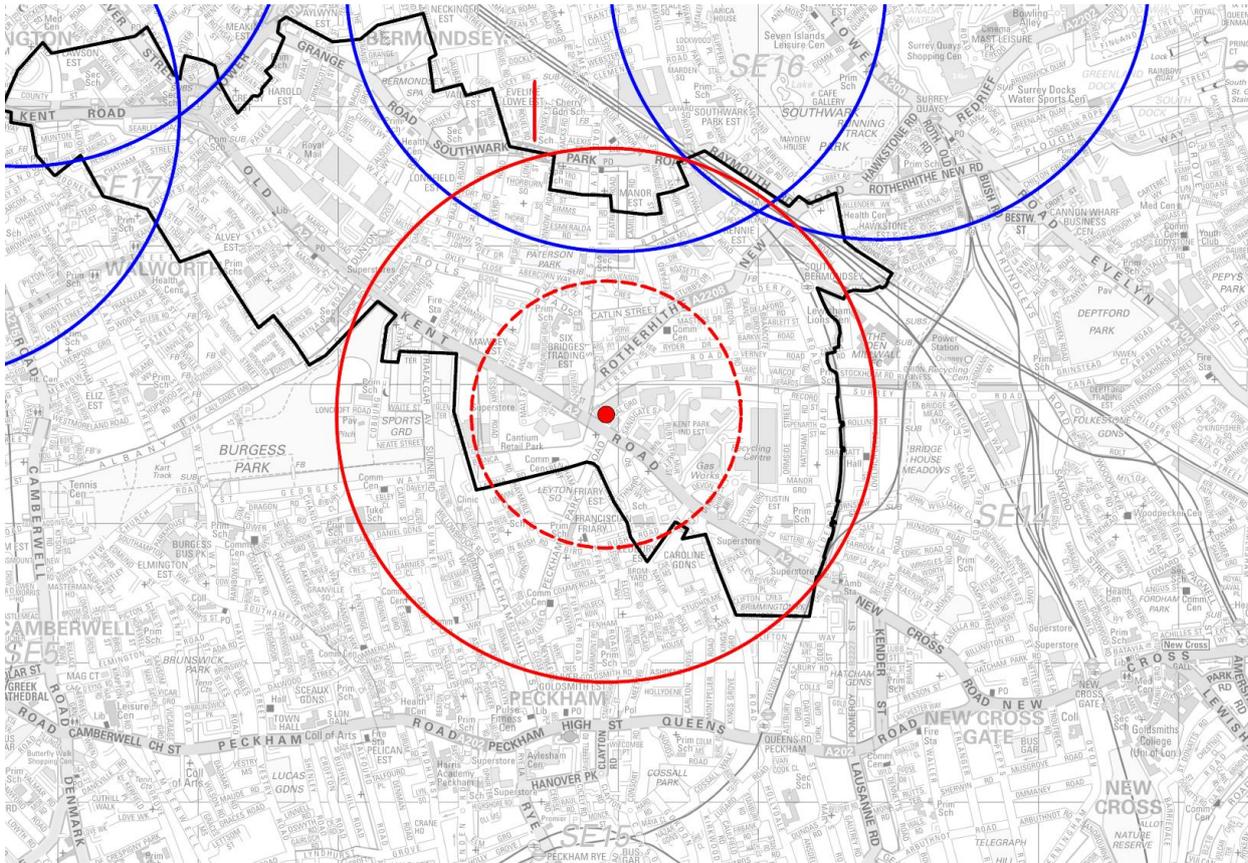


- 4.11.1.4 The station would lie close to Old Kent Road – the main bus corridor enabling interchange between the extension station and bus services. The location would also be serving this main pedestrian corridor in the OA and be well positioned for routes that arrive northbound from Peckham Park Road, although bus routes crossing the Old Kent Road to the east would have a longer interchange with the station such as route P12.
- 4.11.1.5 Site option J enables a station on an orientation that can provide an efficient alignment to and from the Old Kent Road and New Cross Gate stations along wither section of the route.
- 4.11.1.6 Overall the option is not planned for further consideration as other options provide a better balance of option J's strengths, and overcome some of its weaker points. These concern the range of bus services that would have good interchange to the station and also the extent to which the catchment overlaps with the other Old Kent Road station and serves the eastern part of the OA.

4.12 Option K – Sandgate Street and Verney Road area

- 4.12.1.1 The site is across existing retail warehouses, one of which fronts onto Rotherhithe New Road and one which fronts onto Sandgate Street. The station would lie on the northside of Old Kent Road. The site is an OKR AAP proposal site, with new development planned for the area.
- 4.12.1.2 Based upon the OKR AAP proposals, the site itself is a planned redevelopment area, and is planned to also include a major new public linear park running between Burgess Park to the west and across through option K site on to north east in areas across Old Kent Road.
- 4.12.1.3 The site would lie across the area of a planned new linear park that runs from Burgess Park to this area and north eastwards. There is a risk that the station construction, if programmed later than the delivery of the new park, could result in significant disruption to that proposal for a number of years whilst the station is constructed.
- 4.12.1.4 The site size is circa 14,000 sqm and therefore has substantial space for a new station to be built on the site.
- 4.12.1.5 The site catchment shown in Figure 22 demonstrates that this option, compared to options I and J achieves a slightly improved coverage of the eastern areas in the OA. The catchment also has less overlap with where a further Old Kent Road station in the north west end of the OA could be, whilst also serving existing communities to the north and south of the Old Kent Road. The option does still fail to cover the whole of the OA eastern end and also the remainder of the Old Kent Road as it runs through Lewisham.
- 4.12.1.6 The station would lie close to Old Kent Road – the main bus corridor enabling interchange between the extension station and bus services. The location would also serve this main pedestrian corridor in the OA and be well positioned for routes that arrive northbound from Peckham Park Road, although bus routes crossing the Old Kent Road to the east would have a longer interchange with the station such as route P12.

Figure 22 - Estimated walk catchment area of station location option K at Sandgate Street and Verney Road area OKR AAP proposal site



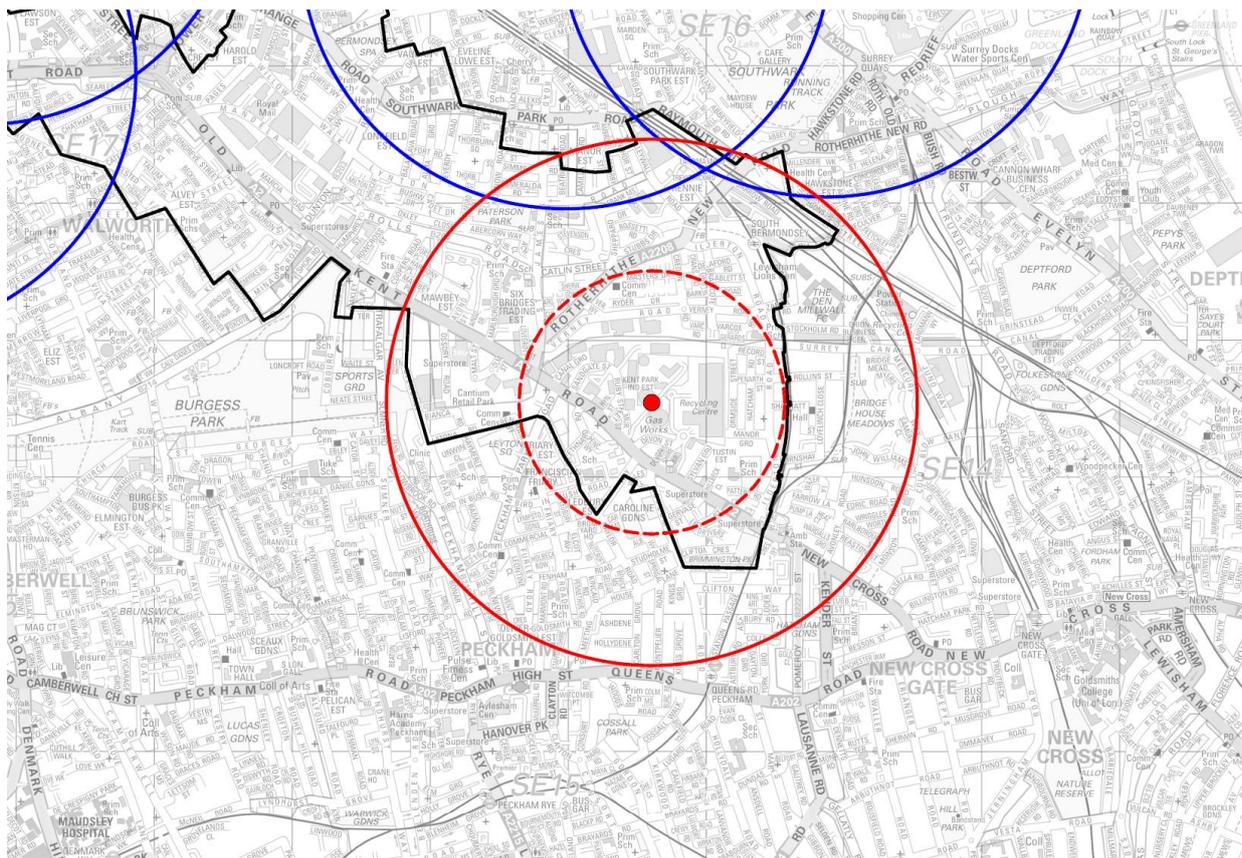
- 4.12.1.7 Site option K enables a station on an orientation that can provide an efficient alignment to and from the Old Kent Road and New Cross Gate stations along the section of the route.
- 4.12.1.8 Overall the option is proposed for further consideration owing to its potential strengths in terms of site size and location relative to the local transport network, with some acknowledged potential weaknesses associated with the coverage of the Opportunity Area.

4.13 Option L – Gasometers

4.13.1.1 The site is across the Gasometers site. Their layout across the site is north west to south east. The site width would mean for the station cut and cover box to fit on the site, it would need to follow the orientation of the gasometers. This has an impact on the alignment of the line, with a need for the line to approach the site from the north. This would add distance and journey time compared to other options for travel from the station in the north end of the Old Kent Road.

4.13.1.2 The site catchment shown in Figure 23 demonstrates that this option achieves a good coverage of the eastern areas in the OA, with many areas within the area of under half the 960 m PTAL catchment zone. The catchment also has less overlap with where a further Old Kent Road station in the north west end of the OA could be, whilst also serving existing communities to the north and south of the Old Kent Road.

Figure 23 - Estimated walk catchment area of station location option L at Gasometers OKR AAP proposal site

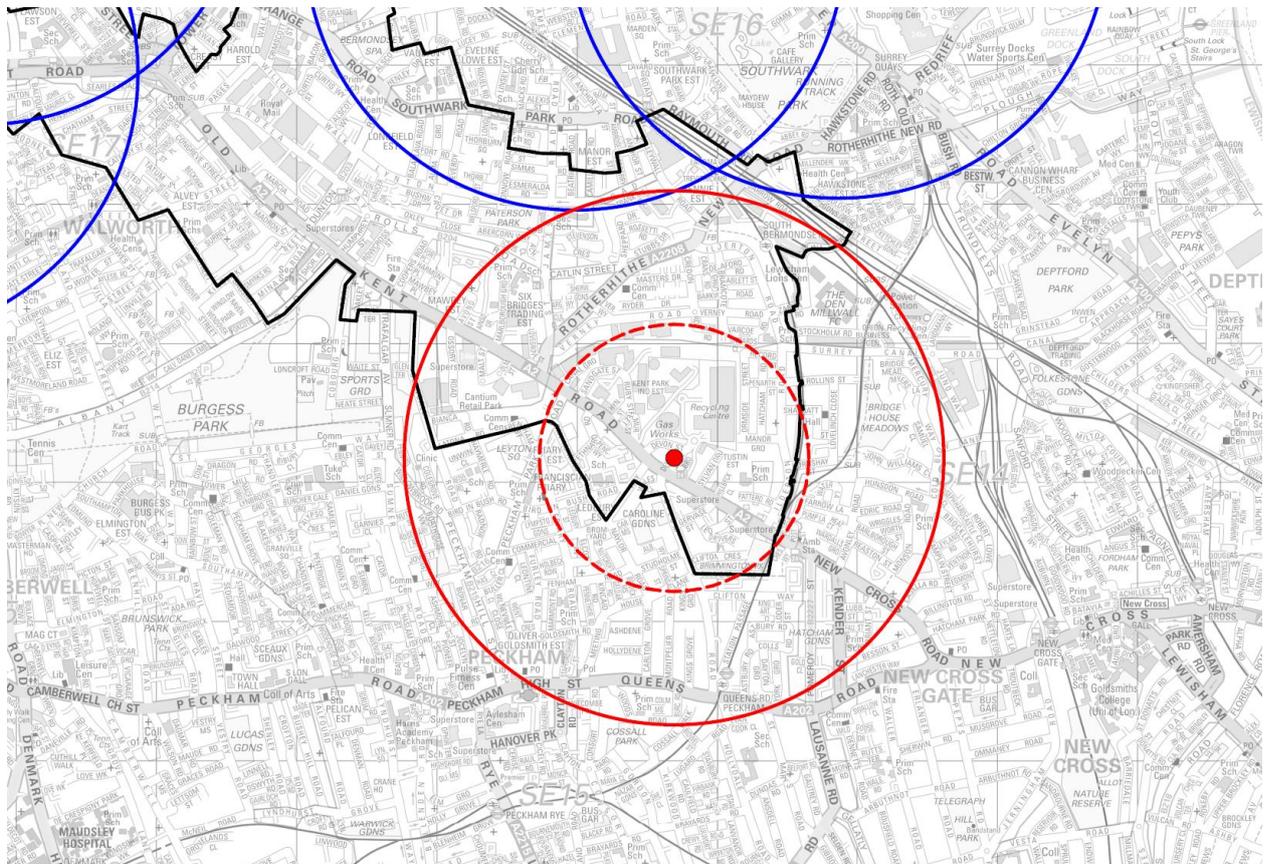


- 4.13.1.3 The site would lie across the area of a planned new park. There is a risk that the station construction, if programmed later than the delivery of the new park, could result in significant disruption to that proposal for a number of years whilst the station is constructed.
- 4.13.1.4 The site size is circa 18,000 sqm and therefore has substantial space for a new station to be built on the site.
- 4.13.1.5 The station is set back from the Old Kent Road and therefore will not provide easy and quick access from bus services. Also the main pedestrian desire lines up and down the Old Kent Road will not naturally pass the station.
- 4.13.1.6 Overall the option is not planned for further consideration as other options provide a better balance of option L's strengths, and overcome some of its weaker points - these concern the site's impact on route alignment and the relatively worse quality of access between bus services and main pedestrian routes on Old Kent Road.

4.14 Option M – Devon Street and Sylvan Grove site

- 4.14.1.1 The site is across the Devon Street and Sylvan Grove OKR AAP development proposal site.
- 4.14.1.2 The site catchment shown in Figure 23 demonstrates that this option achieves a good coverage of the eastern areas in the OA, with many areas within the area of under half the 960 m PTAL catchment zone. The catchment also has less overlap with where a further Old Kent Road station in the north west end of the OA could be, whilst also serving existing communities to the north and south of the Old Kent Road. The site also avoids substantial overlap with the New Cross Gate area where the next station towards Lewisham would be.
- 4.14.1.3 The site size is circa 15,000 sqm and therefore has sufficient space for a new station to be built on the site. The OKR AAP proposals do not suggest significant park space on the site as opposed to other options and there are no currently known specific development plans for the site. If programmed with the redevelopment of the area, the station could be delivered and integrated into the planned development area.

Figure 24 - Estimated walk catchment area of station location option M at Devon Street and Sylvan Grove OKR AAP proposal site

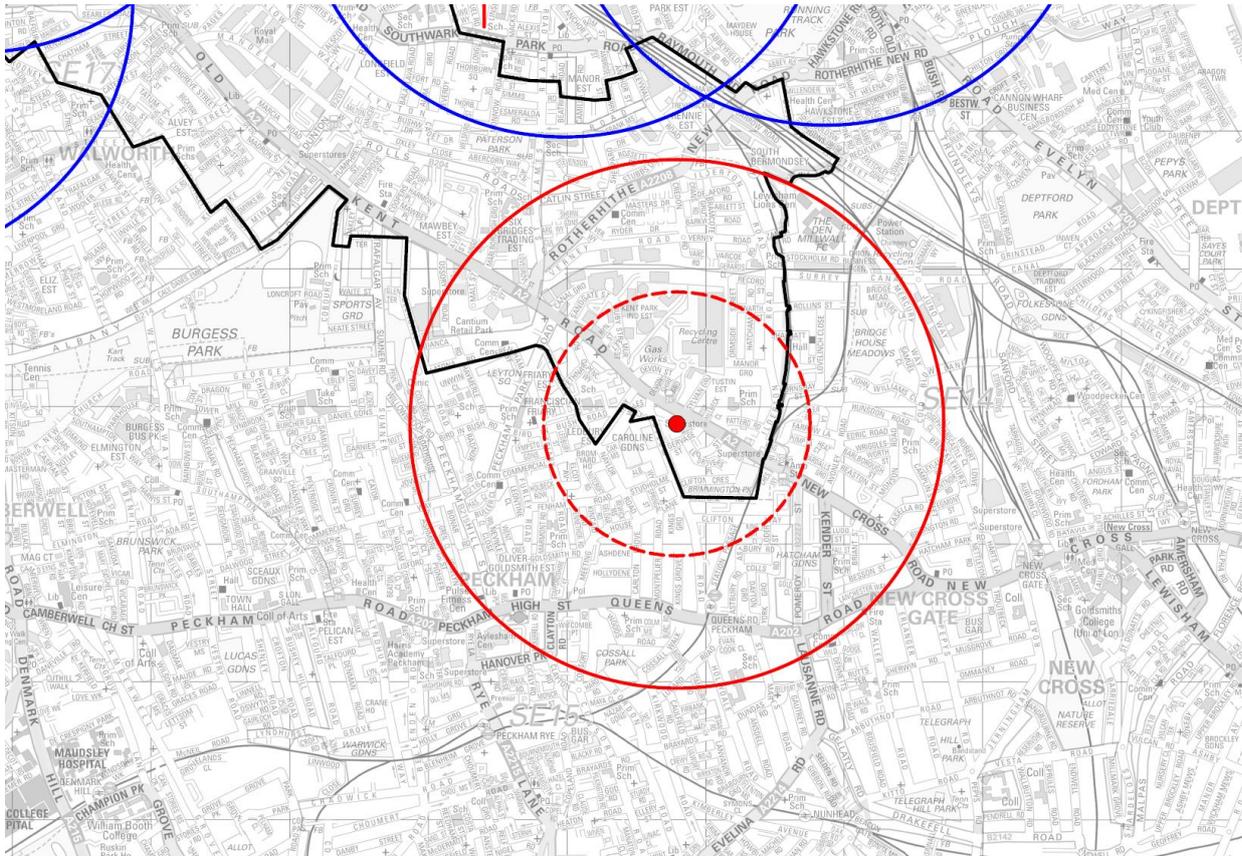


- 4.14.1.4 The station would have good access to the Old Kent Road and therefore will provide easy and quick access from bus services. This would include routes such as P12 which cross the OA from Asylum Road to Ilderton Road and therefore would stop close by to this station option. The main pedestrian desire lines up and down the Old Kent Road will also be effectively served by the station.
- 4.14.1.5 Site option M enables a station on a orientation that can provide an efficient alignment to and from the Old Kent Road and New Cross Gate stations along the section of the route.
- 4.14.1.6 Occupying a site on the northern side of Old Kent Road in this location, as opposed to alternative options nearby, presents some constraints and challenges. We understand from discussion with Southwark Council that the large waste processing facility just to the north and which is accessed via the local road network around the station site is not expected to change use for sometime after the assumed opening date of the extension. As a result there would be a significant constraint associated with the construction of the station and the risk of impacting access to the waste processing plant which provide an important London-wide function.
- 4.14.1.7 Furthermore, from the perspective of locating the station to best serve the planned and future local communities, there is a risk that the station will lie in a location where one of the closest neighbouring land uses is primarily industrial with road-based trip generation. This would therefore undermine the objective of the extension providing access to the existing and local residential communities in the Opportunity Area, at least until the future of the waste processing plant is resolved in the late 2030s.
- 4.14.1.8 Overall, option M performs well across some of the factors considered, however there are some significant constraints associated with the site location, primarily concerning the local land use of the waste processing facility. This option, due to the availability of other alternatives in the locality, is not proposed for further consideration at this stage.

4.15 Option N – Toys R Us site

- 4.15.1.1 The site is on the Toys R Us site which fronts onto Old Kent Road, just to the east of Asylum Road. The site is an OKR AAP proposal site for future redevelopment.
- 4.15.1.2 The site catchment shown in Figure 25 demonstrates that this option achieves a good coverage of the eastern areas in the OA, with many areas within the area of under half the 960 m PTAL catchment zone. The catchment also has less overlap with where a further Old Kent Road station in the north west end of the OA could be, whilst also serving existing communities to the north and south of the Old Kent Road. The site also avoids substantial overlap with the New Cross Gate area where the next station towards Lewisham would be.
- 4.15.1.3 The site size is circa 10,000 sqm and therefore has sufficient space for a new station to be built on the site. The site could potentially include the Aldi site to the east however at this point it is not assumed necessary based on the consideration of site size alone.
- 4.15.1.4 The OKR AAP proposals do not suggest significant park space on the site as opposed to other options and there are no currently known specific development plans for the site. If programmed with the redevelopment of the area, the station could be delivered and integrated into the planned development area.
- 4.15.1.5 The station would have good access to the Old Kent Road and therefore will provide easy and quick access from bus services. This would include routes such as P12 which cross the OA from Asylum Road to Ilderton Road and therefore would stop close by to this station option. The main pedestrian desire lines up and down the Old Kent Road will also be effectively served by the station.
- 4.15.1.6 Site option N enables a station on an orientation that can provide an efficient alignment to and from the Old Kent Road and New Cross Gate stations along the section of the route.

Figure 25 - Estimated walk catchment area of station location option N at Toys R Us
OKR AAP proposal site



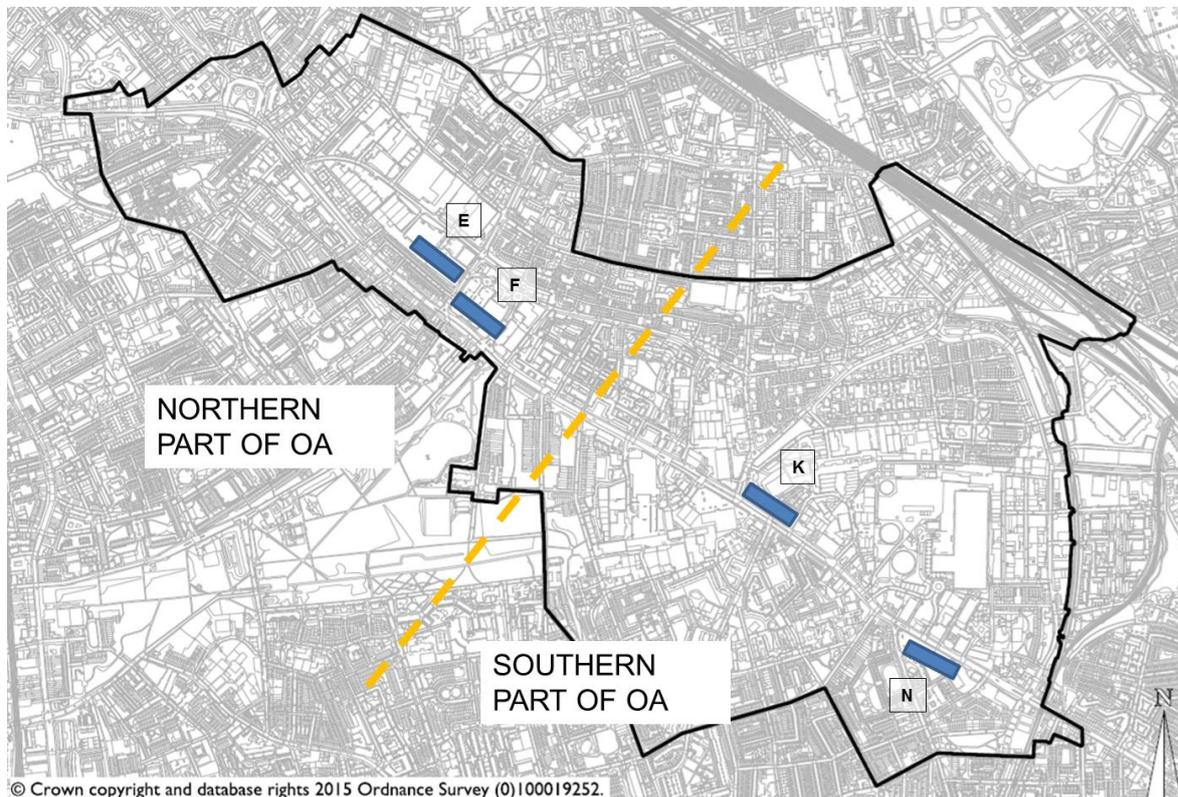
4.15.1.7 Overall, option N performs well across the factors considered. The station location option should be able to effectively serve the wider OA, the local transport network connections, whilst ensuring the alignment remains efficient and minimises passenger journey times on the extension. The site option size is also suitable for construction of a cut and cover station helping to ensure the option is similarly less risky, complex or costly like many other options considered in this area of the OKR OA.

4.16 Summary of options for shortlist assessment

4.16.1.1 There are four options for consideration in the shortlist stage covering the northern end of the OA and two options considered for the shortlist assessment covering the south eastern end of the OA. The options are shown in Figure 26 and listed below:

- Option E – Mandela Way development area
- Option F – Tesco site
- Option K – Sandgate and Verney Road
- Option N – Toys R Us site

Figure 26 – Options for shortlist assessment



4.16.1.2 The shortlist assessment will now consider the characteristics of the sites in more detail in order to help establish the best performing site in each area for presentation in the public consultation.

5 The assessment method

- 5.1.1.1 The assessment method applied has been developed from a process applied on the assessment of Nine Elms station locations during the planning of the Northern line extension. The method has been developed to ensure we consider the local characteristics of the area each option is in.
- 5.1.1.2 It is important to recognise that, due to the early stages of the development of the Bakerloo line extension project, the design of options and their implementation is at an outline level of feasibility and therefore the options are appraised on this basis.
- 5.1.1.3 The shortlist assessment considers the options across a range of criteria, falling under the seven areas below:
- **Local Connectivity:** Considering how the option will improve connectivity to other modes such as Rail and Buses, and also to the walk and cycle network
 - **Impact of Operation:** To ensure that an option is compliant with LUL standards, and identify those which are not.
 - **Cost of Operation:** Identifying the number of staff required and operational hours of any station which may be built.
 - **Impact of Construction:** To highlight where options will have an impact on the local community and whether or not mitigating factors have / have not been identified for these.
 - **Acceptability:** Considering the impact that each option would have in the local area and the likely public acceptability of this in general, given current and future residents and businesses in the area and also what the passenger (wider public) is likely to prefer.
 - **Land Ownership / Occupation:** Considering the scale of impact across land owners who will be affected as a result of building the option.
 - **Policy compliance:** Considering how each option fits with the relevant area and borough policies in place.
- 5.1.1.4 The scoring of options is undertaken on a relative basis across those available – to do so, all options are scored against a criterion at the same time, based upon the comparative impact of each. The assessment outturns a ranking of each option against each criterion, providing the best performing and worst performing options to be identified. Where there is a lack of a clear cut case between options, a tied ranking can be awarded.

6 Results of the assessment for Old Kent Road northern area

6.1 Old Kent Road station I options evaluation

6.1.1.1 The two options considered in this next stage of assessment have been evaluated against the criteria and their performance described in Table 4. The appraisal has determined that there are some different strengths and weaknesses between the two options but also many areas where no significant difference can be identified at this stage based on the principles applied concerning the design and construction assumed for the stations and also the current knowledge available to us prior to the public consultation. Given this, overall at this stage there is no single preferred option.

6.1.1.2 As set out in Table 4, the key strengths and weakness of each option are described below for each option along with the areas in which little difference exists.

6.1.2 Option E Key Strengths and Weaknesses

6.1.2.1 Option E key strengths include its relative proximity to a large proposed growth area in the Opportunity Area as a whole. The Mandela Way area is one of the largest redevelopment areas and, whilst most station options considered are on sites proposed in the AAP for change and development, the site at option E could serve the heart of a new commercial and residential area.

6.1.2.2 We currently consider that Option E's current land uses provide less amenity value relative to option F, and therefore may have less impact on the local community from this perspective. Nonetheless it is also recognised all the sites are employment sites and that the prospect of construction of the extension on a site is likely to displace the current businesses and their workforce which would have their own impact.

6.1.2.3 The site, with the current surrounding land uses has fewer constraints for the route alignment associated with potential conflicts with tall buildings and their deep foundations. This could increase the flexibility regarding the precise orientation and siting of the station box across the site option E.

6.1.2.4 The site's position, slightly further north of option F does however add to greater curvature and route length for the route alignment corridor option from Elephant and Castle via the Walworth and Aylesbury area. Whilst the station site option can cater for both route alignment corridors, it is relatively less well positioned compared to option F.

6.1.2.5 The option is located away from the Old Kent Road. Whilst the distance does not make it infeasible to connect the station via a subway route or surface route to the Old Kent Road itself, it is nonetheless further which would add to access times. In addition the subway route may be best achieved by routing under the existing residential area to the south of the site, which could increase the area impacted by the construction of the station.

6.1.2.6 The site is bordered by residential buildings along its south side. This places station construction works and operations closer to likely permanently occupied premises and therefore increases the risks and challenges of ensuring that impacts of the station are minimised.

6.1.3 Option F Key Strengths and Weaknesses

6.1.3.1 Option F key strengths include its relative proximity to Old Kent Road itself and the closer links to the large number of bus services operating along the road. The proximity would serve to provide a shorter access time from the main high street for pedestrians.

6.1.3.2 Option F sits on a site surrounded by highway and with no site boundary with residences. This could help reduce the impacts of construction. The site size is also above the desirable minimum and therefore could also aid construction by reducing complexity, risk and potentially cost.

6.1.3.3 Option F is better positioned, given its position slightly further south of the alternative, for catering for both alignment corridor routes and their respective shafts with more direct and therefore shorter and straighter alignments. This could provide relatively better passenger journey times and lower whole life costs for the railway. In addition the station site option's position also make access from the south side of Old Kent Road and Burgess Park shorter via either a road crossing or a potential additional station entrance across the road accessed via an underpass / subway.

6.1.3.4 Option F key weaknesses are that the site is potentially constrained to the east by the tall apartment block. The block may have deep foundations which may mean the extension either needing to avoid the block, with impacts on the orientation of the station and the line's wider alignment, or tunnelling through the existing piles which could add risk and complexity to the construction of the tunnels. There could also be a risk of increased noise and vibration impacts from the tunnelling to the residents in the block were tunnelling through the piles undertaken.

6.1.3.5 The site, whilst above the desirable minimum area for the construction site, is slightly narrower than the length of the station box, assuming an orientation of the box parallel to the Old Kent Road highway. This may require either excavations of the station box end from under Albany Road or the temporary closure of Albany Road for cut and cover construction. The former would add some complexity to the construction whilst the latter has the potential to increase the impacts of construction on the transport network by diverting traffic.

6.1.3.6 The site is occupied by a large food superstore and petrol filling station. The site function provides amenity to the local area and motorists and therefore utilising the site relative to the alternative may have a greater impact on local residents. There are, however, a number of alternative food supermarkets on the Old Kent Road and there is also the potential that the superstore could relocate in the local area given the wider range of sites proposed to change land use and be developed as set out in the Southwark AAP for Old Kent Road.

6.1.4 Options E and F similarities

- 6.1.4.1 Option E and F have a number of similarities and areas where no clear difference is currently considered to exist between the options. When taking these aspects into consideration with their respective strengths and weaknesses, it is not possible at this stage to identify a single preferred option for a station.
- 6.1.4.2 Based upon the published Old Kent Road AAP, the sites both entail sites for future change and redevelopment in order to deliver the AAP vision. There is therefore no clear strength of either option at this stage in this context. More details about the AAP and local development plans would assist in future consideration of the site options.
- 6.1.4.3 The sites are both well placed to connect to the local cycling network that is planned, including the proposed Quietway running parallel to the north of the Old Kent Road. The future pedestrian and cycling network and the operation of the bus network locally is currently being developed by Southwark and TfL for their respective road networks. Therefore at this stage insufficient detail exists to make further consideration of the strengths and weaknesses of the two site options.
- 6.1.4.4 Given the relative proximity of the sites to one another compared to the scope of the Opportunity Area, the PTAL impact of the two station options is not a determining factor. Both options would provide increased PTALs that would help to justify the development densities proposed for the Opportunity Area in this part of the Old Kent Road, relative to the density matrix set out in the London Plan.
- 6.1.4.5 Given the principles applied concerning the approach to construction and the site size required, there is no clear difference at this stage between the options relating to the quality and range of facilities provided by a station such as step free access, and the cost of operating the stations.
- 6.1.4.6 Both sites have a similar range of options for access to them during construction, with either access via Old Kent Road to the junction of Dunton Road or alternative routes to the north of Old Kent Road.

Table 4 - Evaluation of Old Kent Road I station options

OKR AAP Objectives	Local Objectives - specific policy context from AAP concerning the sites under consideration.	Assessment Criteria	Assessment of the option	Methodology Notes	Site E: A station between Mandela Way and Old Kent Road Comments	Site F: A station at Tesco Superstore site Comments
<p><i>Recognising the Old Kent Road opportunity area's role and location, we are including it within an extension of London's central activities zone (CAZ). Development will be expected to strengthen its role in the CAZ through:</i></p> <ul style="list-style-type: none"> <i>• Providing of a rich mix of land uses including residential, employment, retail, cultural, higher education and leisure.</i> <i>• Bringing forward development which benefits the local residential and business communities</i> 	<p><i>Proposals should:</i></p> <ul style="list-style-type: none"> <i>• Strengthen the street frontage on the Old Kent Road, repairing the existing gaps.</i> <i>• Reinforce the rhythm of building heights on the Old Kent Road. Tall buildings will be appropriate in the areas of transformation around Bricklayers Arms, the Tesco site and Southernwood Retail Park and on Mandela Way.</i> <i>• Sustain and enhance the significance of heritage assets and their settings including Page's Walk conservation area, 155 Old Kent Road (the</i> 	<p>Local Connectivity</p>	<p>To what extent does the option increase connectivity to the strategic walking network in the local area? If no "official" strategic walk network exists in the area, consider general pedestrian network.</p>	<p>Consider whether the option provides access to the strategic walking network or not. Consider whether option allows for improved journey times by walking. Consider the general main pedestrian routes, desire lines and the visibility and ease of access to the site for pedestrians from these.</p>	<p>No part of London's strategic walk network goes through the OA. The site would have connections to local roads envisaged in the AAP, or access onto Mandela Way and Dunton Road. There could also be potential for a subway from Old Kent Road to the site, although this would be relatively long (circa 80 metres). The site would therefore have relatively longer journey times from the main pedestrian corridor along the Old Kent Road high street.</p>	<p>No part of London's strategic walk network goes through the OA. The site would have good links onto the Old Kent Road high street - the main thoroughfare in the area, helping to reduce journey times and with good visibility for way finding. The site could also link with the new local road network that is planned for the development site and to the new and existing communities to the north. There is also potential to provide a subway entrance from the south side of the OKR which could reduce the severance of the highway and shorten walk access times from existing and new communities on the southern side of Old Kent Road.</p>
			<p>What impact does the location have on Public Transport Accessibility Levels and are these expected to be relevant to potential growth in the area</p>	<p>Assess the PTAL forecast for the area in future. The critical measure in most locations will be whether the station results in a PTAL moving into the 4 to 6b band as this is where the planning system considers the highest density development can occur.</p>	<p>The sites are relative close by to one another and therefore there is no significant difference in terms of impact on PTAL</p>	<p>The sites are relative close by to one another and therefore there is no significant difference in terms of impact on PTAL</p>
			<p>To what extent does the option increase connectivity to the strategic</p>	<p>Consider access to the strategic cycling network, cycle superhighways & cycle hire network in the local area</p>	<p>The option has good access to the Quietway to the north of the site on Willow Walk. Access to the busier cycling corridor on the Old Kent Road is less optimal compared to site F, given this site is set back from the road with access via a number of local roads.</p>	<p>The option has good access to the Quietway to the north of the site on Lyton Road / Oxley. Access to the busier corridor on the Old Kent Road is good and direct, with the station set on Old Kent Road and therefore providing an easy means of stopping / starting journeys between cycling and the Tube.</p>

<p>while contributing to Southwark and London's need for homes and jobs.</p> <ul style="list-style-type: none"> Reinforcing the role of the Old Kent Road as a high street. Supporting the function of the opportunity area in providing a diversity of spaces for office, light industrial, production and cultural activities. Improving the green infrastructure network as a resource for Southwark and London. Enhancing the area's character, sensitively incorporating heritage assets into high quality development of a scale and density which befits a central London location and improving public transport accessibility. 	<p>White House), Driscoll House and the old fire station.</p> <ul style="list-style-type: none"> Ensure that tall buildings at Bricklayers Arms preserve the outstanding universal value of the Palace of Westminster world heritage site in views from the Serpentine Bridge in Hyde Park. <p>Public realm and green infrastructure Proposals should contribute to the provision of high quality public realm and green infrastructure set out below:</p> <p>Mandela Way - Use development opportunities to provide a substantial new park which has safe, direct and attractive links to Salisbury Row Park to the west, Burgess Park to the south west and Bermondsey Spa to the</p>		cycling network in the local area?			
			To what extent does the option increase interchange options to other modes of transport in the area of interest and improve existing interchange connections?	Consider all modes but particularly Buses as they are the predominant form of public transport on the Old Kent Road.	Buses are the main form of public transport that a station should aim to achieve good interchange with. The location of the station is set back from the Old Kent Road, and even with a potential subway entrance, most bus services stop on the east side of the road junction with Dunton Road owing to road space availability. As a result, the option is less well placed to achieve quick interchange with buses compared to option F.	Buses are the main form of public transport that a station should aim to achieve good interchange with. The location of the station is fronting onto Old Kent Road at the point where most bus services stop on the east side of the road junction with Dunton Road owing to road space availability. As a result, the option is well placed to achieve quick interchange with buses compared to option F. Similarly, many of the bus stops on the south side are on the east side of the road junction and therefore a potential subway entrance to the Tube would serve these locations well.
			To what extent does the option allow connectivity to the existing and planned communities in the Old Kent Road area?	Consider all modes	The option has less potential to provide effective links to the south side of Old Kent Road owing to its position behind street blocks running alongside the north of Old Kent Road and its greater distance north compared to option F.	The option is further south than option E and has better potential for overcoming severance caused by the Old Kent Road highway, as delivery of a subsurface link to the south side of the Old Kent Road would be relatively short and provide quicker journey times.
			To what extent will the option help deliver step free interchange?	Consider all modes	This option should be capable of delivering step free access at the station from platform to street.	This option should be capable of delivering step free access at the station from platform to street.
			To what extent does the option improve the quality of the public realm through making a positive contribution to the local urban environment and improving the perceived vitality of the area	Consider pedestrian and cyclist experience in particular in terms of the quality of the public realm and the built environment.	The site is set back within a commercial development area, behind Marcia Road and the residential terraces along it. The area is proposed to become a new residential and commercial centre with a linear park and the station could therefore integrate with this new area and make a positive contribution to the significant change that is proposed.	The site is a busy supermarket store providing a focus at this point on the Old Kent Road for local shopping. The site is proposed to change in the future based on the Old Kent Road AAP, with the future site planned to be part of a more significant town centre / high street area. The station at this site can support this outcome by focusing passengers into this area. The extent of change from the perspective of public realm and vitality in the area is perhaps lower given the sites existing function and role on high street.
Impact of	Noise &	Consider noise &	The site option should not result in any substantial impacts on	The site option currently carries a risk of the alignment		

<ul style="list-style-type: none"> Facilitating transport improvements including the Bakerloo Line extension and better links for people walking and cycling. Addressing the need to reduce carbon emissions, improve air quality and reduce the risk of flooding. 	north.	Operation	Vibration	vibration generated by the option, i.e. Noise generated as a result of track alignment and vibration risks particularly to deep piled tall buildings where foundations will be closer to running tunnel depths.	local existing or planned development as the route alignment should be able to avoid existing deep piled buildings and can be actively designed into planned new development.	to the south east towards the southern end of Old Kent Road passing a tall existing residential block (11 storeys) which may have deep piled foundations close by to the most northerly running tunnel.
			Alignment of Tracks	Consider the impact of the option on the following aspects: - track route alignment to and from the station option	The option's alignment requires a route that, if connecting to the overruns tunnel option to Elephant and Castle, swings back north eastwards in order to curve back and straighten for achieving a station on an orientation for an efficient route to the next station south. For the alignment coming from the New Kent Road, the option has not significant impact and is no better or worse than option F.	The option's alignment requires a route from the overruns tunnel option that is more direct and shorter than for option E. The route via New Kent Road is no better or worse. Overall option F better supports delivery of quicker more direct alignment routes to Elephant and Castle.
		Cost of Operation	Staffing Costs	Consider the number of staff required to manage the new station option, consider the opening hours of the station	There are no differences between the station options.	There are no differences between the station options.
		Impact of Construction	How difficult is it to construct the option and therefore is this likely to make the option more or less expensive compared to others?	Consider the site's circumstances in terms of its surrounds and what the site is likely to mean in terms of the actual type of construction works for a station in that location .i.e. cut and cover or require more complex excavations. Impacts on complexity, risks and costs can be considered.	The site is sufficiently sized for construction of a cut and cover box.	The worksite meets the size requirement however construction could be more complex and impactful as the eastern end of the station box may need to be either excavated from under part of Albany Road or the road closed to allow cut and cover construction of this part of the station.
			What impact will construction of the option	Consider impact on traffic flow, road closures and pavements, cycle	Both site options, if assuming delivery prior to new development occurring and the delivery of new more local roads and public parks, have a degree of flexibility over vehicle routings and sites with sufficient space to help reduce	Both site options, if assuming delivery prior to new development occurring and the delivery of new more local roads and public parks, have a degree of flexibility over vehicle routings and sites with sufficient space to

		have on the road and public transport network in the local area?	lanes and bus stops / stands, diversions, delay, journey times, capacity of the current road network	the impact on the existing transport network.	help reduce the impact on the existing transport network.
Acceptability	Public Acceptability	Consider the public acceptability to the option - i.e. If the options require removal of public amenities, quality of station service provided in operation, impact of construction work.		The option entails sites that provide no clear public amenity, given their current function.	The site consists of a large food superstore which is well used by the local area. It also provides a petrol station. Removal of these would result in some loss of amenity and convenience for the local area, although there are alternatives on Old Kent Road and it may also be possible to retain some element of food store on the site or in the local area.
	Local (resident) Acceptability	Consider local residents acceptability to the option - i.e. if the option requires removal of residential buildings		The site shares a boundary on the southern side with the rear of residential properties. A potential subway entrance would also pass under some residential properties. It is likely that the construction impacts and proposals would have lower local resident acceptability than option F.	The construction of the station does not require works directly adjacent to residential properties. The option is therefore less likely to receive local resident opposition on this basis than option E.
	Local (Business) Acceptability	Consider local businesses acceptability to the option - i.e. if the option requires removal of business buildings		Both options require removal of business buildings.	Both options require removal of business buildings.
	Fit with current development proposals	Consider current development proposals in the area of interest		We understand that there is an existing consent for part of the site concerning planned use for laundry processing and bakery. However these plans are understood to be under review now that the OKR AAP has been launched. There are no other firm plans for the site. Therefore the option fits with current development proposals and plans.	There are no plans for redevelopment known to exist for the Tesco site, other than the policy designation in the OKR AAP - that it is a proposal site for mixed use development and green space. Owing to the size of the site, delivery of a station would not preclude these deliverables and given there is no known programme for the site the station proposal has potential to fit with the future programme of redevelopment here.
	Land Ownership / Occupation	Public or Private land ownership / occupation	Consider whether the land is privately owned (business/residential) or publically owned and the current occupation. Consider		The site is privately owned by at least two private owners. Potentially the station works may need to encroach onto the neighbouring site to the north west. This could increase the number of land owners requiring negotiations with and make site assembly for station construction more complicated.

				the ease of acquisition of the land as a result of the ownership/occupation.	
Policy Compliance	To what extent is the option compliant with Southwark Local Plan?	Consider Southwark Local Plan	In general, the site option would be compliant with the AAP objectives, although the option is likely to have less potential to reinforce the role of the Old Kent Road as a high street, given the station and its main entrance would be set back in a commercial development, separated by a residential road (Murcia Road).	In general, the site option would be compliant with the AAP objectives, and is likely to have better potential to reinforce the role of the Old Kent Road as a high street, given the station can become part of the new frontage along the road.	
	To what extent is the option compliant with the area specific policies OKR AAP?	Consider OKR AAP	The option may require delay or impact the delivery of the substantial new public park in the Mandela Way area, if the programme for delivering the station is not aligned with redevelopment or if the site required needs to occupy land that could be for the public park.	The area specific policy refers to the site being appropriate for tall buildings in this location. The delivery of the station will not prevent delivery of tall buildings, however the station would need to be delivered prior to their construction if it is to be delivered on this site.	
	Does the site have an environmental or heritage designation?	Consider the designations identified	The site currently has a designation as Preferred Industrial Location - Local. It is understood this designation may be under review as part of the AAP consultation. The site is also in an Archaeological Priority Zone. Overall there are no other designations that would impact the site and the delivery of the station. The designations currently in place and proposed or implied by the AAP are not considered to have a major impact on the likelihood of delivering a station at this site.	The site is in an Archaeological Priority Zone. Overall there are no other designations that would impact the site and the delivery of the station. The designations currently in place and proposed or implied by the AAP are not considered to have a major impact on the likelihood of delivering a station at this site.	
	To what extent is the option supportive / aligned to other Transport Plans e.g. Network Rail	Consider current transport plans for the Old Kent Road area held by relevant authorities.	The plans for the local transport network on the Old Kent Road are under development and insufficient detail exists at this stage to consider this criterion.	The plans for the local transport network on the Old Kent Road are under development and insufficient detail exists at this stage to consider this criterion.	

7 Old Kent Road 2 shortlist options evaluation

7.1.1.1 The two options considered in this next stage of assessment have been evaluated against the criteria and their performance described in Table 5. The appraisal has determined, on a similar basis to Old Kent Road 1 station options, that there are some different strengths and weaknesses between the two options for Old Kent Road 2 station but also many areas where no significant difference can be identified at this stage. Given this, overall at this stage there is no single preferred option.

7.1.1.2 As set out in Table 5, the key strengths and weakness of each option are described below for each option along with the areas in which little difference exists.

7.1.2 Option K Key Strengths and Weaknesses

7.1.2.1 Option K is well placed for providing close links to the cycle network. The site can both front on to Old Kent Road and on to St James's Road leading to Rotherhithe New Road. The site could therefore provide close access to the Quietway to the north of Old Kent Road and any future improvements to cycling routes along the Old Kent Road itself which is a busy cycling corridor.

7.1.2.2 Option K is better placed to serve the central redevelopment area in the Old Kent Road, focused around the current Cantium Retail Park to the south west of the station site. At the same time the site lies on the western fringe of the more southerly large development area so could provide some access to this area too. There would however be some sites in the Opportunity Area towards the south eastern end that could benefit from less PTAL improvement due to their distance from the station, compared to option N, whilst the Cantium Retail Park area could still benefit from the improved accessibility from Old Kent Road 1 and a second station at site option N.

7.1.2.3 There are no current tall buildings acting as significant constraints to the site in terms of the impact on the location of the station and the potential tunnel alignment corridors to and from the station in each direction. There is a tall new development to the north on Verney Road, however this is not expected to act as a constraint unless the station location on option K is sited to the very northern end of the location under consideration.

7.1.2.4 Option K is also well placed for links to the local bus network. As with the cycle network access, the station location means the numerous bus routes operating along the Old Kent Road but also across (north-south) via Peckham Park Road and St James's Road are intercepted. The current precise locations of bus stops are set away from the busy road junction between Old Kent Road and St James's Road and therefore there may be a need to shift their position in order to shorten the interchange distance between the proposed Tube station and stopping Bus services.

7.1.2.5 Option K is located further north from the alternative option N and therefore is a further distance from the New Cross Gate station – the next proposed southerly stop on the extension. The greater distance may warrant the addition of a ventilation and intervention shaft between Old Kent Road 2 station and New Cross Gate as the distance may exceed the current assumed threshold distance between stations. This is dependent on the precise alignment and eventual detailed ventilation and

intervention strategy developed for the line, but at this early stage in planning it is a key weakness of the option as it could add to costs and construction impacts associated with the additional shaft and head-house and the land it would require.

7.1.2.6 Access for construction vehicles to option K can be undertaken from a range of routes and directions which provides some flexibility, however the site's position on a busy road junction adds risks of both impacts on the movement of construction vehicles and their own potential to add congestion to general traffic at this point on the TLRN.

7.1.3 Option N Key Strengths and Weaknesses

7.1.3.1 The location of option N relative to the spread of total proposed development in the southern half of the Old Kent Road Opportunity Area is a strength. The location means the option can make an improvement in the accessibility of a wider area of the Opportunity Area than the alternative option K.

7.1.3.2 The location also provides better coverage of existing communities that lie to the south of Old Kent Road between there and Queen's Road. This is expected to increase the ease with which both passengers from future new development and from existing communities can walk to Tube services from an Old Kent Road 2 station.

7.1.3.3 Option N is situated away from a busy a road junction as option K, making the option less complicated and challenging in terms of both providing for improved walking, cycling and bus network links to the station whilst also catering for high volumes of traffic movements through a busy road junction on the TLRN.

7.1.3.4 It is recognised however that at the current time there are fewer north-south bus routes across the Old Kent Road to the wider area that pass by the proposed station site for option N relative to option K. Therefore there is currently a relative weakness in terms of the range of bus services that this site option may be able to connect to unless the bus routings can be amended.

7.1.3.5 The site is also further from current planned cycle routes such as the Quietway 1 route running to the north of Old Kent Road between Waterloo and Greenwich. The station site option does however similarly front onto Old Kent Road, like option K, and so could provide easy access to any future new cycling infrastructure on Old Kent Road itself which is currently a busy cycle route.

7.1.3.6 There are no current significant constraints identified that could affect the running tunnel alignment corridor to and from the station in both directions. The majority of significant new tall development is anticipated to be along the northern side of Old Kent Road.

7.1.3.7 Sat along the north boundary of option N site proposal is a residential apartment block called Radford Court (812 Old Kent Road). Whilst this is not a unique to the option N, with option K also bordering residential addresses, the apartment building is circa 4 to 5 storeys tall and may pose a constraint if it has deep foundations which could then constrain the orientation and layout of the station box on the site.

7.1.4 Options K and N similarities

7.1.4.1 Option K and N have a number of similarities and areas where no clear difference is currently considered to exist between the options. When taking these aspects into consideration with their respective strengths and weaknesses, it is not possible at this stage to identify a single preferred option for a station.

7.1.4.2 Based upon the published Old Kent Road AAP, the sites both entail sites for future change and redevelopment in order to deliver the AAP vision. There is therefore no clear strength of either option at this stage in this context. More details about the AAP and local development plans would assist in future consideration of the site options. Similarly, current site designations and policies also do not differ significantly between either site.

7.1.4.3 The sites both impact commercial land uses and neighbour residential land uses and therefore are currently expected to have similar impacts and challenges associated with site assembly, and managing the impacts of construction and operation (e.g. noise and vibration) in these respects. A cut and cover approach to construction currently appears achievable for both options.

7.1.4.4 Given the principles applied concerning the approach to construction and the site size required, there is no clear difference at this stage between the options relating to the quality and range of facilities provided by a station such as step free access, and the cost of operating the stations.

Table 5 - Evaluation of Old Kent Road 2 station options

OKR AAP Objectives	Local Objectives - specific policy context from AAP concerning the sites under consideration.	Assessment Criteria	MTS Goal	MTS Outcome	Assessment of the option	Methodology Notes	Site K: A station on land in Sandgate and Verney Road area	Site N: A station on the Toys R Us site
<p>Recognising the Old Kent Road opportunity area's role and location, we are including it within an extension of London's central activities zone (CAZ). Development will be expected to strengthen its role in the CAZ through:</p> <ul style="list-style-type: none"> • Providing of a rich mix of land uses including residential, employment, retail, cultural, higher education and leisure. • Bringing forward development which benefits the local residential and business communities while contributing to Southwark and London's 	<p>Proposals should:</p> <ul style="list-style-type: none"> • Provide a clearly defined network of streets and spaces through existing clusters of retail and employment land, connecting into the surrounding street network. • Provide a strong and active frontage onto the Surrey Canal route, helping generate activity on the route and providing natural surveillance. • Strengthen the street frontage on the Old Kent Road, repairing the existing gaps. • Reinforce the rhythm of building heights on the Old Kent Road, with the tallest elements helping define the areas of transformation shown on Figure 9. • On development sites which are 	<p>Local Connectivity</p>	<p>Support economic development and population growth</p>	<p>Balancing capacity and demand for travel through increasing public transport capacity and/or reducing the need to travel</p>	<p>To what extent does the option increase connectivity to the strategic walking network in the local area? If no "official" strategic walk network exists in the area, consider general pedestrian network.</p>	<p>Consider whether the option provides access to the strategic walking network or not. Consider whether option allows for improved journey times by walking. Consider the general main pedestrian routes, desire lines and the visibility and ease of access to the site for pedestrians from these.</p>	<p>The location of the option is good for the walk network in the area. The option would serve the main thoroughfare of the Old Kent Road, but also, lying on a significant road junction, would be at the confluence of routes from areas along Rotherhithe New Road and Peckham Park Road.</p>	<p>The site is well located for the main thoroughfare of the Old Kent Road, and lies next to the confluence of the main roads called Asylum Road and Commercial Way with Old Kent Road, connecting the site to key routes from Peckham town centre and the residential area to the south of the station site.</p>
					<p>What impact does the location have on Public Transport Accessibility Levels and are these expected to be relevant to potential growth in the area</p>	<p>Assess the PTAL forecast for the area in future. The critical measure in most locations will be whether the station results in a PTAL moving into the 4 to 6b band as this is where the planning system considers the highest density development can occur.</p>	<p>This option, with a location further north, results in slightly lower levels of PTAL in development areas and existing areas in the south east part of the OA, whilst supporting PTALs in the central area but at a level where the effect is marginal in comparison to the increase these areas already gain from the OKR station in the Mandela way area.</p>	<p>This option generates a more balanced distribution of PTALs in the higher band (>4) owing to its location towards the southern end of the OA relative to option K.</p>
					<p>To what extent does the option increase connectivity to the strategic cycling network in the local area?</p>	<p>Consider access to the strategic cycling network, cycle superhighways & cycle hire network in the local area</p>	<p>This option has strong connectivity to the cycling network and main routes used. The site enables easy access to the Quietway to the north via either Rotherhithe New Road or St James's street. The option also fronts on to Old Kent Road so serves this busy corridor for cyclists well too.</p>	<p>The option would serve the busy corridor of the Old Kent Road well, however the links to recognised cycling routes such as Quietways or Superhighways are less direct than other options considered.</p>
			<p>Improve</p>	<p>Improving</p>	<p>To what</p>	<p>Consider all modes</p>	<p>The option has good potential for</p>	<p>The bus stops are located close to the site on</p>

<p><i>need for homes and jobs.</i></p> <ul style="list-style-type: none"> • Reinforcing the role of the Old Kent Road as a high street. • Supporting the function of the opportunity area in providing a diversity of spaces for office, light industrial, production and cultural activities. • Improving the green infrastructure network as a resource for Southwark and London. • Enhancing the area's character, sensitively incorporating heritage assets into high quality development of a scale and density which befits a central London location and improving public transport accessibility. • Facilitating transport improvements including the Bakerloo Line 	<p><i>located away from the Old Kent Road tall buildings should reinforce the hierarchy of streets and spaces. The tallest elements will be focused around important public spaces.</i></p> <ul style="list-style-type: none"> • Give careful consideration to the relationship between new development and existing neighbourhoods, helping integrate old and new and managing the character around the edges of the development areas. • Sustain and enhance the significance of heritage assets and their settings including the Caroline Gardens and Glengall Road conservation areas, Clifton Terrace and the Canal Grove cottages. 		<p>transport opportunities for all Londoners</p>	<p>the accessibility of the transport system</p>	<p>extent does the option increase interchange options to other modes of transport in the area of interest and improve existing interchange connections?</p>	<p>but particularly Buses as they are the predominant form of public transport on the Old Kent Road.</p>	<p>interchange with bus services, sitting on the Old Kent Road and at the junction of Rotherhithe New Road that services travel up from the Old Kent Road. These bus services are greater in number than the alternative site which is better placed to serve routes via Ilderton Road. The bus stops may need some relocation to better position them for interchange with the station.</p>	<p>both sides of the road and the site can serve routes that operate along the Old Kent Road as well as north-south routes in this part of the OA that link to existing communities and large development areas in the east and north of the OA. The site is less well placed for the more numerous routes that operate up Rotherhithe New Road compared to the closer Ilderton Road.</p>
			<p>Supporting wider regeneration outcomes</p>	<p>To what extent does the option allow connectivity to the existing and planned communities in the Old Kent Road area?</p>	<p>Consider all modes</p>	<p>The location would serve the central area and parts of the southern OA area well, however owing to its more central location in the OA and greater overlap with the BLE station to the north, the option serves fewer existing communities to the east and south of the OA where there is no tube access.</p>	<p>This option to the east is relatively better than option K at serving existing communities whilst also including in their catchment the wide range of development sites in the eastern part of the OA. Whilst they are further from the central section of the OA, these locations also fall in the catchment of the northerly BLE station, and therefore would have good access and choice over which station to use.</p>	
			<p>Improving the physical accessibility of the transport system</p>	<p>To what extent will the option help deliver step free interchange?</p>	<p>Consider all modes</p>	<p>This option should be capable of delivering step free access at the station from platform to street.</p>	<p>This option should be capable of delivering step free access at the station from platform to street.</p>	
			<p>Enhance the quality of life of all Londoners</p>	<p>Enhancing streetscape, improving the perception of urban realm</p>	<p>To what extent does the option improve the quality of the public realm through making a positive contribution to the local urban environment and improving the perceived vitality of the area</p>	<p>Consider pedestrian and cyclist experience in particular in terms of the quality of the public realm and the built environment.</p>	<p>The option provides an opportunity to create an improved pedestrian oriented focus to the road junction that the station would sit on. Replacing big box retail stores, the option could improve the frontage at this section of the Old Kent Road. However being sited at a road junction, the station will have to compete with the pressures to ensure smooth traffic flow and so the opportunity to fully exploit the station's presence may be more constrained and complex to achieve relative to other options.</p>	<p>This option would replace a large and relatively quiet car park and toy store with a station and associated new development that would make a marked difference over the existing use. It would substantially change the nature of this area and could link to the north side of the Old Kent road with a short underpass link, increasing the scale of the impact. Fronting onto the Old Kent Road in an area away from a junction, there is arguably greater scope to deliver an improved urban realm for pedestrians and cyclists that will not require compromises or complexities over the management of road space.</p>
<p>Impact of Operation</p>	<p>Enhance the quality of life of all Londoners</p>	<p>Improving perceptions and reducing the impacts of noise</p>	<p>Noise & Vibration</p>	<p>Consider noise & vibration generated by the option, i.e. Noise generated as a result of track alignment and vibration risks</p>	<p>The site has no tall buildings close by to the proposed location of the station itself however a site further north recently constructed would have an impact if the station or alignment moved further north up the site. Therefore the impacts and</p>	<p>This option entails a station close to Radford Court, which as a residential building of circa 4 to 5 storeys adds a constraint close to the station site for which the impacts of noise and vibration from operations of the station and lines and construction will need to be carefully</p>		

<p>extension and better links for people walking and cycling.</p> <ul style="list-style-type: none"> Addressing the need to reduce carbon emissions, improve air quality and reduce the risk of flooding. 					<p>particularly to deep piled tall buildings where foundations will be closer to running tunnel depths.</p>	<p>challenges associated with noise and vibration from construction and operation may be lower than the alternative site. There is a residential road to the north east of the site, which whilst not possessing tall buildings, may add some challenges to managing the noise and vibration impacts of works.</p>	<p>managed.</p>
				Alignment of Tracks	<p>Consider the impact of the option on the following aspects:</p> <ul style="list-style-type: none"> track route alignment to and from the station option 	<p>This option may require an intermediate vent shaft between the station and New Cross Gate station. This would add cost to the projects and increase the number of land owners and occupiers impacted by the extension proposals. There are also planned tall developments immediately to the east of the site which if constructed prior to the extension and without provision for the running tunnels may constrain the alignment to and from the station location.</p>	<p>The option supports a north west to south east alignment and should enable a relatively direct journey to each of the next stations. There is less surrounding development planned to either side of the site, notwithstanding existing Radford Court, which makes the alignment challenges relatively lower than the alternative site.</p>
	Cost of Operation	Support economic development and population growth	Reducing operating costs	Staffing Costs	<p>Consider the number of staff required to manage the new station option, consider the opening hours of the station</p>	<p>All station options are assumed to have potential for one or more ticket halls requiring staffing and therefore there is not significant difference between options.</p>	<p>All station options are assumed to have potential for one or more ticket halls requiring staffing and therefore there is not significant difference between options.</p>
	Impact of Construction	Enhance the quality of life for all Londoners	Improving public transport satisfaction; Improving road user satisfaction	How difficult is it to construct the option and therefore is this likely to make the option more or less expensive compared to others?	<p>Consider the site's circumstances in terms of its surrounds and what the site is likely to mean in terms of the actual type of construction works for a station in that location i.e. cut and cover or require more complex excavations. Impacts on complexity, risks and costs can be considered.</p>	<p>All options considered can be built as cut and cover stations based on current work to date. Therefore there is no significant difference between options.</p>	<p>All options considered can be built as cut and cover stations based on current work to date. Therefore there is no significant difference between options.</p>
				What impact will construction of the option have on the road and public transport network in the local area?	<p>Consider impact on traffic flow, road closures and pavements, cycle lanes and bus stops / stands, diversions, delay, journey times, capacity of the current road network</p>	<p>The option lies at a busy road junction although the roads are suitable for the routing of HGVs without the need for transit along local roads. There is flexibility for how traffic could reach the site which may lessen the extent to which the nearby busy junction is required to accommodate vehicle movements.</p>	<p>The option lies away from busy road junctions, and has a local road network that provides flexibility over the routings to vehicles in and out of the site, helping to lessen the impact and reduce pressure on any one route and junction in and out of the site.</p>
	Acceptability	Enhance the quality of life for all	Enhancing the built and natural	Public Acceptability	<p>Consider the public acceptability to the option - i.e. If the</p>	<p>The impact of this option is not expected to have a significant impact on the wider public - the retail units concerned</p>	<p>The impact of this option is not expected to have a significant impact on the wider public - the retail units concerned provide low amenity</p>

			Londoners	environment		option requires removal of public amenities, quality of station service provided in operation, impact of construction work.	provide low amenity and the construction of the station at this location would in general be in location that much of the wider public would consider is accessible.	and the construction of the station at this location would in general be in location that much of the wider public would consider is accessible.
					Local (resident) Acceptability	Consider local residents acceptability to the option - i.e. if the option requires removal of residential buildings	The site borders a row of residential properties to the east. There could be a direct impact on them from externalities generated by construction (e.g. Noise).	The site borders a row of residential properties to the south. There could be a direct impact on them from externalities generated by construction (e.g. Noise).
					Local (Business) Acceptability	Consider local businesses acceptability to the option - i.e. if the option requires removal of business buildings	The site consists of multiple businesses that would be impacted by the option. These businesses are likely to have concerns due to either their need to cease trading or removing their opportunity to develop the sites as envisaged by the OKR AAP.	The site required consists of a number of business occupiers / freeholders. These businesses are likely to have concerns due to either their need to cease trading or removing their opportunity to develop the sites as envisaged by the OKR AAP.
					Fit with current development proposals	Consider current development proposals in the area of interest	Some of the sites are not available until post 2020 due to existing leases, whilst other parts of the site have made enquiries with council. Overall there is no reason to assume that a station at this location cannot fit future development proposals.	The site owner is understood to have not commenced any new plans for the site, intending to keep the existing toy store presence here. Overall there is no reason to assume that a station at this location cannot fit future development proposals, notwithstanding the current owner's plans, given the site is a proposal site in the OKR AAP.
		Land Ownership / Occupation	Supporting regeneration and tackling deprivation	Supporting wider regeneration	Public or Private land ownership / occupation	Consider whether the land privately owned (business/residential) or publically owned and the current occupation. Consider the ease of acquisition of the land as a result of the ownership/occupation.	The site is privately owned by multiple owners, however they are generally larger companies who are likely to be more familiar with the commercial process we would seek to follow as a promoter in acquiring the site. This will make site assembly more complex and potentially more costly.	The site is owned by a single land owner that is a large multinational company and therefore generally more familiar with the commercial process we as the promoter would seek to follow in acquiring the site. It may be necessary to utilise 812 Old Kent Road - consisting of a single warehouse building hosting three SMEs. Overall, assembling the site and negotiating its purchase, especially if limited to the Toys R Us store, should be simpler and less complex relative to other sites.
		Policy Compliance	Enhance the quality of life for all Londoners	Enhancing the built and natural environment	To what extent is the option compliant with Southwark Local Plan?	Consider Southwark Local Plan	The proposed site would help improve transport in the OA and serve a large number of development areas - although some sites to the east of the OA would be less well served. There is also less scope to reinforce the high street at this location given the road junction and the need to ensure smooth traffic flows can continue here in the future given the road's strategic function.	The proposed site would provide opportunity to serve the eastern part of the OA, enabling a large number of sites to benefit from an improved transport network. The site would also support the proposal for moving towards mixed use development and reinforcing the high street in this area.
					To what extent is the option	Consider OKR AAP	The area specific policies envisage a mixed use, residential lead development on this site along with a new green linear	The area specific policies envisage a mixed use, residential lead development on this site. The station option is not considered to conflict

				compliant with the area specific policies OKR AAP?		park. The station option is not considered to conflict with these area specific policies that the Borough is in the process of adopting based on the timescales for their delivery.	with these area specific policies that the Borough is in the process of adopting based on the timescales for their delivery.
				Does the site have an environmental or heritage designation?	Consider the designations identified	The site is currently designated as a Strategic Industrial Location. The site is also an Archaeological Priority Zone. On the whole the former is under reviews as part of the AAP and the latter would not have a significant impact on the proposal for a station.	The site is currently designated as a Strategic Industrial Location. The site is also an Archaeological Priority Zone. On the whole the former is under reviews as part of the AAP and the latter would not have a significant impact on the proposal for a station.
				To what extent is the option supportive / aligned to other Transport Plans e.g. Network Rail	Consider current transport plans for the Old Kent Road area held by relevant authorities.	The plans for the local transport network on the Old Kent Road are under development and insufficient detail exists at this stage to consider this criterion.	The plans for the local transport network on the Old Kent Road are under development and insufficient detail exists at this stage to consider this criterion.

8 Conclusion and Recommendation

- 8.1.1.1 The assessment of Old Kent Road station options has evaluated a range of sites. At the current time, there remain two options to locate each of the proposed Old Kent Road 1 and Old Kent Road 2 stations. The options have a range of strengths and weaknesses specific to their site locations, however overall there are a large number similarities based on the current assessment.
- 8.1.1.2 Given the current findings it is proposed to undertake public consultation on the remaining options in order to understand the views of respondents concerning the options, including the land owners and occupiers of the sites identified. We will also continue to work with Southwark Council as they develop further proposals and details for the sites and their surrounds as part of the Opportunity Area's AAP development.