

Transport for London

BLE New Cross Gate Update

This note provides a summary of the assessment of the two options for a station at New Cross Gate. These are described as the 'consulted proposal', which is a cut and cover station box in the Sainsbury's car park and the 'alternative proposal' which is mined and under the railway lines and has been proposed by Sainsbury's and Mount Anvil. Both proposals are included at Appendix A. The key information from the assessment is supplied in Table 1 which details all considerations where either a significant or slight difference between the options was found based on the criteria considered. In summary the key areas of assessment where there is a distinct difference in performance between the two options are set out below.

Impact of Construction

- Construction cost – **Consulted proposal** has better performance
- Difficulty and impact of construction – **Consulted proposal** has better performance
- Construction impacts on local roads and public transport networks – **Consulted proposal** has better performance
- Construction duration – **Consulted proposal** has better performance

Impact on and cost of operations

- Station operating costs (non staff) – **Consulted proposal** has better performance
- Vent strategy in operation – **Consulted proposal** has better performance
- Access and servicing arrangements of station in operations – **Consulted proposal** has better performance

Local Connectivity and Policy Compliance

- Interchange with bus and rail networks – **Consulted proposal** has better performance
- Alignment with other transport plans – **Consulted proposal** has better performance
- Potential impact upon housing delivery – **Consulted proposal** has better performance

Local Resident, Business and Wider Public Impacts

- Local residential community considerations including loss of existing housing – **Consulted proposal** has better performance in longer term, albeit the **Alternative proposal** can deliver housing sooner
- Economic impact on jobs – **Alternative proposal** has better performance

Supplementary to Station Considerations – BLE main worksite

The options discussed in this report relate to the construction of a station at New Cross Gate only and do not consider wider worksite requirements that would be necessary to construct the Bakerloo line extension. Aside from construction sites where BLE infrastructure such as stations and shafts will be delivered, construction of the extension will also require a number of additional sites to enable the railway to be built. The most significant of these relates to a 'main worksite' from which the tunnel boring machines will be launched and the majority of spoil from the tunnels will be extracted.

The requirements for a 'main worksite' include being of an adequate size to enable key activities to take place, ease of access from the strategic road network and accessible by either rail or river to enable sustainable (non-road based) transportation of spoil from the worksite. Due to these requirements, there are only a few viable sites along the line of route of the extension that could fulfil this purpose, of which the New Cross Gate Sainsbury's site is one.

In the event that a route beyond Lewisham is adopted as the preferred option for the BLE, worksite', the New Cross Gate site still remains an option for the 'main worksite' as it can enable tunnelling construction both northwards to Elephant and Castle and south to the end of the tunnelled section, including a potential connection on to the rail network for conversion to BLE operations.

In the event that the New Cross Gate site was confirmed as the 'main worksite', either station option could still be constructed, however in both cases, the whole Sainsbury's site would be required as only that possesses both the scale and interface with the East London Line railway to enable main worksite functions and logistics.

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Area of consideration	Consulted proposal	Alternative proposal
<p>1. Impact of construction</p>	<p>Difficulty of construction:</p> <ul style="list-style-type: none"> Least risk and complexity to construct owing to the construction methodology being a diaphragm walled cut and cover box construction. Once external walls are completed, risks are significantly reduced as they are externalised from the main area of construction works. The size and location of the site aids flexibility for working which could both reduce the likelihood of risks materialising and their impact if they do occur. The design will need to address presence of sewer flanking north side of station box. The site size may aid wider BLE works including support of adjacent station site works and a reception point for the Tunnelling machines for servicing prior to onwards tunnelling through the change of geology in the Old Kent Road area. This benefit assumes launch of the machines is from an alternative site. <p>Construction impacts on road and public transport networks:</p> <ul style="list-style-type: none"> Direct access to the site would be from the TLRN, with no required movements on local roads. The TLRN is the most suitable roads for works traffic. Existing bus standing can be facilitated at the front of the site owing to the site's size and the flexibility this gives in terms of the siting of station construction works. No anticipated road closures <p>Construction costs of each option for station infrastructure:</p> <ul style="list-style-type: none"> The option is forecast to be at least £55m less than the alternative station site option. This is based on assumed operation of the store during BLE works. Less work is required for the construction of an excavated box within the retail park boundaries. Probability of lower cost than current estimate is high subject to the development of risk provision relative to alternative option. <p>Construction duration:</p> <ul style="list-style-type: none"> Expected construction duration would be shorter than the alternative given the relative construction methodology, the complexity and risk associated with each option and the ability to undertake station and tunnel works concurrently. 	<p>Difficulty of construction:</p> <ul style="list-style-type: none"> This option presents a greater risk and complexity to construction owing to large sections of the station requiring sub-surface mining in highly variable ground conditions, with reduced space leading to a smaller portion of works through cut and cover box method. Significantly smaller site size (narrower and shorter compared to the alternative site) results in a more constrained programme and increases risk of delivery and disruption caused by construction Works have to negotiate the presence of and have a greater interface with the East London Line which provides a constraint at both surface and subsurface. <p>Construction impacts on road and public transport networks:</p> <ul style="list-style-type: none"> Need to undertake significant construction activity with access via a local residential road – Goodwood Road. Limitations of that local road's access from A2 (restricted junction movements) and the focus of vehicle movements east of the station creates greater potential conflict with busy pedestrian desire lines between the station and high street and University. Split site working makes option more subject to impacts of A2 congestion on works efficiency and logistics. Likely road closures required on either Goodwood Road and/or the A2. <p>Construction costs of each option for station infrastructure:</p> <ul style="list-style-type: none"> The option is forecast to be at least £55m more expensive than the alternative station site option. This cost may increase given the New Cross Gate Area Framework includes conceptual proposals for more homes and significantly more commercial space than the current consented 148 homes proposal. Extensive ground treatment works around the whole area and under the East London Line station and tracks would be required due to the mined approach to large parts of the station's construction and its proximity to one of the busiest rail lines in the country. The cost and risk provision for this option remain higher than the consulted option. <p>Construction duration:</p> <ul style="list-style-type: none"> Forecast to have a longer construction programme due to work phasing, significant ground improvements required both generally and specifically around the ELL in unpredictable soil conditions and the need to undertake station and tunnel works consecutively rather than concurrently.

Area of consideration	Consulted proposal	Alternative proposal
<p>2. Impacts on operations</p>	<p>Access arrangements for servicing (e.g. maintenance, emergencies):</p> <ul style="list-style-type: none"> The site is well suited to enabling access for servicing with scope for a purpose built junction on to the A2 whilst the main station entrance also being accessible directly from that road. This is owing to the size of the frontage which can accommodate these uses and the greater scope for managing road space on the TLRN at this point to facilitate that. The larger site provides greater flexibility for designing a station that can function safely and efficiently. <p>Passenger journey times:</p> <ul style="list-style-type: none"> The position of the station, given the site available and its impact on the station's design means that there are no significant impacts on passenger journey times. <p>Vent strategy:</p> <ul style="list-style-type: none"> The vent solution is best fit with whole-line strategy which seeks to apply venting from platform ends to both support in-station function and the inter-station stretches of line. The station requires no offset vent infrastructure, achieving the most efficient arrangement of vertical venting direct from the platform ends to surface, and hence should reduce the volume of infrastructure (civils and mechanical) required. <p>Emergency access/egress</p> <ul style="list-style-type: none"> Emergency access/egress routes are located at the ends of the platforms and provide as direct a route as possible in/out of the station. 	<p>Access arrangements for servicing:</p> <ul style="list-style-type: none"> The design of the station given the site size limitations is expected to generate more complex access to major equipment due to the mined configuration, with longer horizontal access routes. Road access to the site in operation is less preferred given that access is via a local road that is left in, left out only. <p>Passenger journey times:</p> <ul style="list-style-type: none"> The position of the station given the site available and its impact on the station's design means a slightly longer interchange distance from entrance to platform level. <p>Vent strategy:</p> <ul style="list-style-type: none"> The vent solution for the station requires shafts offset from the main passenger concourse owing to the latter positioned under the East London Line. This is less preferred by TfL and is likely less preferred by the London Fire Brigade. The approach increases the length of inter-station vent sections. The station requires additional ventilation addits at platform level. <p>Emergency access/egress</p> <ul style="list-style-type: none"> Emergency access/egress routes are located at the ends of the platforms, however the station design necessitates a longer route in/out of the station. This would likely be less preferred by the London Fire Brigade.
<p>3. Local connectivity</p>	<p>Interchange to other modes (particularly Bus and Rail at New Cross Gate):</p> <ul style="list-style-type: none"> The site can provide a more efficient and effective bus interchange - an outcome directly related to the greater scope to allocate and manage road space and amend the site frontage to aid this – see next point below/ Greater scope exists to allocate and manage road space along the frontage of the Sainsbury's retail park site aiding road users for travel to and past the station as the A2 is wider past this site. A coherent interchange with shorter distances between the majority of bus stops which lie to the west of the existing station and the Bakerloo line can be achieved compared to the alternative option. <p>Improving public realm and local urban environment:</p> <ul style="list-style-type: none"> Improving the public realm and local urban environment is facilitated most fully by this site option. The location and site size better enables it to fulfil the 	<p>Interchange to other modes (particularly Bus and Rail at New Cross Gate):</p> <ul style="list-style-type: none"> The site's position is less well located for the majority of bus stops (located to the west of the station). Limited road space on New Cross Road (A2) past this site and the proximity of the site to the junction with Goodwood Road mean there is less scope for relocating bus stops to improve access to this station site. For rail interchange, the station orientation means slightly longer distances from street and Rail platforms as compared to the Sainsbury's site option. <p>Improving public realm and local urban environment:</p> <ul style="list-style-type: none"> Whilst some improvement could be delivered to the public realm and local urban environment through the delivery of the station (such as through an improved site frontage on to the A2), the site is limited owing to its position at

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	<p>place-making objectives set out in the Area Framework and ensure the surface transport networks have sufficient space to optimise the station's interchange function within that context.</p>	<p>a narrower and shorter section of the A2 and the lesser flexibility within the site to position the station in order to release land for a station forecourt and wider public footways. This affects the capability to provide an optimal interchange with surface transport networks.</p>
<p>4. Local resident, business and wider public impacts</p>	<p>General public considerations:</p> <ul style="list-style-type: none"> The site option has a greater impact on the wider public in the event of a potential loss of the grocery retail on the site. TfL has however set out a proposal to enable continued operation of the grocery store during BLE works to mitigate this impact. Evidence from an assessment of the retail market shows that these impacts from the loss of grocery retail on the site would be significantly mitigated by the extent of alternative provision in the current grocer's catchment area and the location of alternative large grocery stores on main transport links from New Cross Gate (both highways A2 for motorised and PT (Bus, ELL)) which provide quick and direct access to them. Effects on the general public from the loss of grocery retail, whilst negative, do not appear to be disproportionate to the outcome from using the site for BLE delivery. There is no reason why a store could not be reinstated on top of the station box upon the completion of construction should planning policy and market conditions in the grocery retail sector make this permissible and viable. <p>Local residential community considerations:</p> <ul style="list-style-type: none"> The site has no direct impact on the local residential community, affecting no residences. <p>Local business considerations:</p> <ul style="list-style-type: none"> The site impacts four businesses, however three of these are already proposed to depart the site under Sainsbury's own development plans. The remaining business, Sainsbury's, on the site may be extinguished by the TfL proposals, however this has not been proven by the operator and the TfL proposals have set out potential means of continued operations of the business. Even in the event of extinguishment, there is no reason why a store could not be reinstated on top of the station box upon the completion of construction. <p>Fit with current development proposals:</p> <ul style="list-style-type: none"> The site is identified for future redevelopment in the Borough local plan and the current land owner is working with the Council to generate plans for the 	<p>General public considerations:</p> <ul style="list-style-type: none"> The majority of the existing site is vacant although there is an existing consent for 148 homes on the site and TfL understands that the consent has been activated – contributing to housing needs more widely. The site's wider uses include small scale retail and food vendors and council and private leasehold housing. Whilst important to the local community, for the wider public the impacts would be relatively low. Additional sites for storage of materials, site offices etc would likely be required in the local area, possibly on adjoining sites. <p>Local residential community considerations:</p> <ul style="list-style-type: none"> There are 23 existing residential units consisting of 14 units in a terrace design providing 30 hostel places, 14 homes in Goodwood House, and 5 homes on New Cross Road. This option has a direct impact on the local residential community as these homes would need to be demolished in order for BLE station works. <p>Local business considerations:</p> <ul style="list-style-type: none"> The site consists of 10 existing commercial units on New Cross Road including services, retail and restaurants. The businesses provide a local function and form the most westerly part of the existing high street. There is no prospect of maintaining their continued operations during works owing to their position on the site where the station is constructed. <p>Fit with current development proposals</p> <ul style="list-style-type: none"> The site is identified for development in the Borough local plan. The site is understood to have an existing consent 148 homes on the site and TfL understands that the consent has been activated. The delivery of a station will require significant land on the site, consuming some of the sites developable capacity. As a result the station proposal has worse fit with the current development proposals or those of the concept set out in the New Cross Area Framework. <p>Economic impact from existing job from commercial / retail</p>

Area of consideration	Consulted proposal	Alternative proposal
	<p>site that align with the Council's policies and proposals.</p> <ul style="list-style-type: none"> Work has demonstrated that the TfL station proposal can integrate with the site concept proposal in the Area Framework enabling the objectives of both the TfL proposal and those for the site's future development to be achieved. <p>Economic impact from existing jobs associated with commercial / retail extinguishment for duration of BLE construction.</p> <ul style="list-style-type: none"> The site employs 239 staff or 140 FTE. The extinguishment of the business in the worst case scenario will lead to a loss of these jobs on the site. In absolute terms the economic loss of these roles, assuming no displacement to other local equivalent employers, is a loss annually of circa £5.48m in terms of London Retail sector output per worker (July 2018 ONS) totalled across the number of workers. TfL's work suggests that diverted customer spend to local retail grocery stores could drive increased employment at store locations meaning a net forecast jobs loss of just 42 FTE, and therefore a reduced loss annually of output per worker of £1.63m. Furthermore, if access to the store is maintained as per the TfL proposal, jobs losses could be largely prevented. <p>Economic impact of job creation during BLE station construction:</p> <ul style="list-style-type: none"> The BLE works to construct a station could generate, at their peak, up to 400 FTE jobs – benchmarked against NLE staffing. This has the potential to generate a peak annual output of circa £20.5m based on London Construction sector output per worker (July 2018 ONS). Post construction of the station, there could be scope to re-provide premises for an equivalent volume of employees as work in the businesses that would require extinguishment in the first place. 	<p>extinguishment for duration of BLE construction.</p> <ul style="list-style-type: none"> The site hosts a cluster of small businesses. An estimate of 15 employees has been assumed for the purpose of this study. The (assumed FTE) businesses are a mixture of retail and services. The estimated loss annually is circa £0.58m in terms of London Retail and services sector output per worker (July 2018 ONS). <p>Economic impact of job creation during BLE station construction:</p> <ul style="list-style-type: none"> The BLE works to construct a station could generate, at their peak, up to 400 jobs. This has the potential to generate a peak annual output of circa £20.5m based on London Construction sector output per worker (July 2018 ONS). Post construction of the station, there could be scope to re-provide premises for an equivalent volume of employees as work in the businesses that would require extinguishment in the first place.
<p>5. Cost of operations</p>	<p>Station operating costs (non staff):</p> <ul style="list-style-type: none"> The station is contained in a single structure which generates a more efficient station form for operations such as servicing and access. This would lead to some lower operating costs compared to the alternative site. 	<p>Station operating costs (non staff):</p> <ul style="list-style-type: none"> This design is expected to generate a relatively more costly station to operate and maintain compared to the consulted option due to the requirement for additional fire and vent infrastructure and the need to place some aspects of the station infrastructure outside the confines of the station box.
<p>6. Land ownership / occupation status</p>	<p>Publicly or privately owned and use and function:</p> <ul style="list-style-type: none"> The site is in private ownership and provides a grocery and retail function. A Petrol Filling Station is also present on the site. Other local alternative sites cater for the functions on the site. 	<p>Publicly or privately owned and use and function:</p> <ul style="list-style-type: none"> The site option would require both private and public land to be used for construction. The public land is in the ownership of the local planning authority, Lewisham. It is used primarily for Council housing, including a hostel.

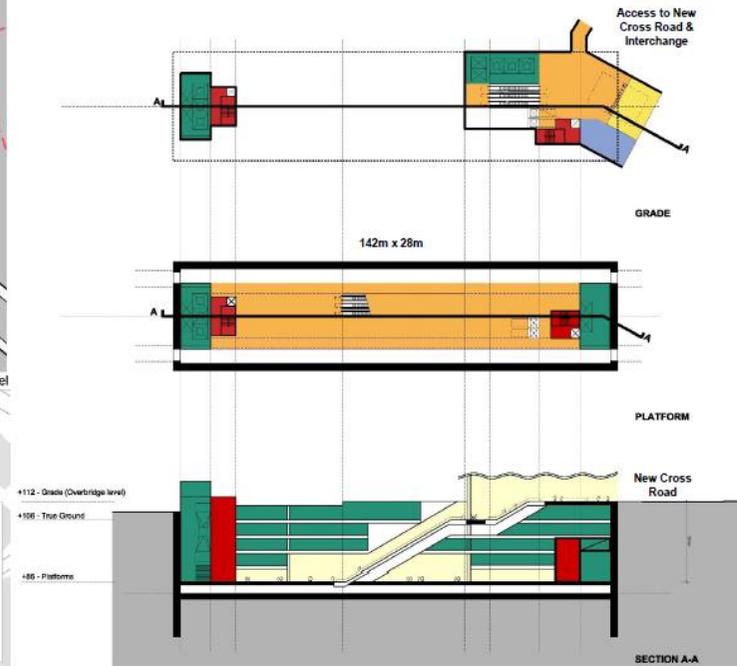
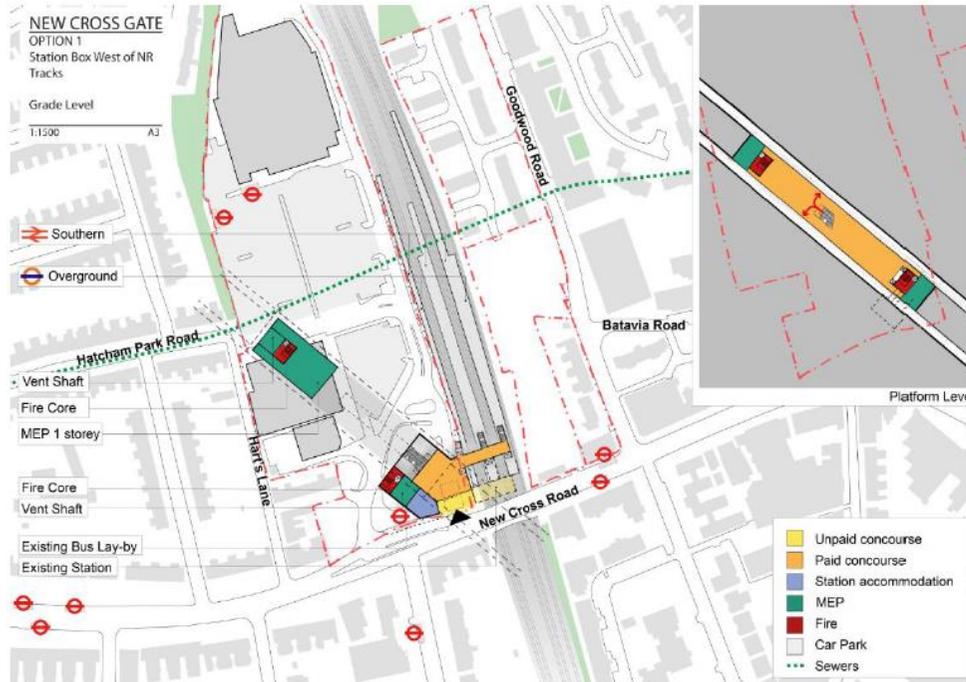
Area of consideration	Consulted proposal	Alternative proposal
	<p>Relevant matters arising from consultation responses:</p> <ul style="list-style-type: none"> • The land owner, Sainsbury's has set out proposals for a new grocery store and housing, with the loss of the remaining retail operators on the site. • The proposed changes of use are not currently reflected in local planning policy and do not have planning consent. Nonetheless, the TfL proposals have been tested and demonstrated as integrating with concepts for the change in land use currently proposed for the site. • Sainsbury's has stated that the grocery store cannot continue to operate in the event of the TfL works taking place. No evidence has been provided. 	<ul style="list-style-type: none"> • The remainder of the sites host local businesses in the retail and services sectors and a vacant area of land that is privately owned. <p>Relevant matters arising from consultation responses:</p> <ul style="list-style-type: none"> • The vacant land on the site is understood to have an active consent based on discussions with the land owners. The consent concerns 148 homes. The local planning authority has also indicated it has received submitted evidence of the consent having been activated. • The site can be assumed to host a significant volume of housing by that time that TfL could serve notice on the site based on any assumed compulsory acquisition timescales under the Transport and Works Act Order process that is being pursued. • The Council has indicated that the council housing on the site would be subject to Council policy for balloting were it to be proposed and made available for the purpose of station works / redevelopment.
<p>7. Policy Compliance</p>	<p>Lewisham Core Strategy / Local Plan:</p> <ul style="list-style-type: none"> • The site is identified for future development in the current Core Strategy. The construction of a station on the site does not conflict with the proposals set out in the strategy, whilst the proposal for the Bakerloo line extension is, overall, supported by the Core Strategy. <p>Local Plans for area:</p> <ul style="list-style-type: none"> • The Council has recently developed the New Cross Area Framework which will serve as an evidence base for the new Local Plan the Borough is developing. • The Area Framework indicates that locating New Cross Station on the Hatcham (Sainsbury's retail park) site offers more benefits than the alternative proposal. • The Area Framework further demonstrates with illustrative proposals that the station site can allow the site to address the challenges and realise its opportunities. • Responses to the Area Framework are supportive of the proposals for Hatcham Works and the Transport and Station Opportunity Study proposals which set out that on balance there are a greater range of advantages for this station option relative to the Goodwood Road site option. <p>Environmental and Heritage land use designations:</p> <ul style="list-style-type: none"> • The site falls within the town centre policy designation. The site is bounded to the north and west at its northern end by strips of land designated as Sites of 	<p>Lewisham Core Strategy / Local Plan:</p> <ul style="list-style-type: none"> • The site is identified for future development in the current Core Strategy. The construction of a station on the site does not conflict with the proposals set out in the strategy, whilst the proposal for the Bakerloo line extension is, overall, supported by the Core Strategy. <p>Local Plans for area:</p> <ul style="list-style-type: none"> • The Area Framework indicates that this station site option has greater limitations and constraints on its ability to allow the Area Framework's objectives and vision to be delivered. <p>Environmental and Heritage land use designations:</p> <ul style="list-style-type: none"> • The site falls within the town centre policy designation. • The site is bounded to the north east at its northern end by land designated as Green Corridor. • At the site's southern end, a small portion of the frontage of the currently vacant land and the Council owned site on the corner of Goodwood Road and New Cross Road fall within a Conservation Area. <p>Alignment with other transport plans:</p> <ul style="list-style-type: none"> • The station site option would integrate poorly with the plans being developed for the A2. The location of the station would be a point where road space allocation towards bus stops and the pedestrian crossing for the station entrance would be difficult to achieve without a detrimental effect on all traffic

Area of consideration	Consulted proposal	Alternative proposal
	<p>Importance for Nature Conservation – note that these areas are not within the site under consideration.</p> <ul style="list-style-type: none"> Along the east side of the site, broadly replicating the area occupied by the ELL, land is designated as Green Corridor. At the site’s southern end, a small portion of the frontage of the site and between the southern end of the Harts Lane terraces to New Cross Road fall within a Conservation Area. <p>Alignment with other transport plans:</p> <ul style="list-style-type: none"> The station site option would integrate with planned junction changes and pedestrian crossing changes to facilitate multi-modal interchange at the station site. The station site would not preclude delivery of Route 1 (an east-west walk cycle link from Hatcham Park Road to Batavia Road over or under the ELL) and could potentially improve Route 1’s function were it designed to intercept a second northern Tube station entrance. The station site works may have synergy and aid delivery of notional Network Rail plans for a sixth platform to increase stopping services at the rail station. <p>Assessment of the potential impact upon housing delivery:</p> <ul style="list-style-type: none"> The current site allocation in Lewisham’s Local Plan is for 250 homes. The site has no planning consent to deliver these homes. The Area Framework states that a revised figure of 800 homes is under consideration by Lewisham. Given no planning application or consent has been made on the site, it is unlikely any housing will be delivered on the site until 2021 – the time of a TWA Order application for BLE, and it is also uncertain precisely what development on the site would get planning permission. The landowner and their development partner have proposed 1,500 new homes on the site, and have initiated discussion with the local authority, however, as yet these proposals do not form part of a planning application, nor would they appear to be in conformity with the current or draft Local Plan. The BLE works would delay delivery of any housing for circa seven years. 	<p>on the A2. This is due to the limited site size and the scope to which it can provide frontage as part of the A2 highway, and the proximity to Goodwood Road junction.</p> <ul style="list-style-type: none"> The Sainsbury’s proposals for this option also entail the provision of bus standing on the site. These proposals are considered impractical owing to the limitation on Goodwood Road junction’s left-in, left-out design and its lack of signalisation and high pedestrian flows across it. TfL has no plans to relocate standing as part of site development in the town centre area. The station site would not preclude delivery of Route 1 delivery and could potentially improve Route 1’s function were it designed to intercept a northern Tube station entrance. The station is on the opposite side of the East London Line to where Network Rail’s notional proposals for a sixth platform would be and therefore there is no clear prospect of synergy with the BLE works. <p>Assessment of the potential impact upon housing delivery:</p> <ul style="list-style-type: none"> TfL understands that the site has an active consent based on discussions with the land owners. The consent concerns circa 148 homes. The local planning authority has also indicated it has received submitted evidence of the consent having been activated. Hence the site can be assumed to host a significant volume of housing by the time that TfL could serve notice on the site based on the assumed acquisition timescales under the Transport and Works Act Order process that is being pursued. Station construction would require the loss of 23 existing units associated with the properties bordering the vacant land to the east & south. The BLE works would delay delivery of any housing for circa seven years were it to occur prior to completion of the consented development on the site. If BLE works took place after completion of the consented development, there would be a net loss of housing in the local area until completion of the BLE works and new development around / above the station site.

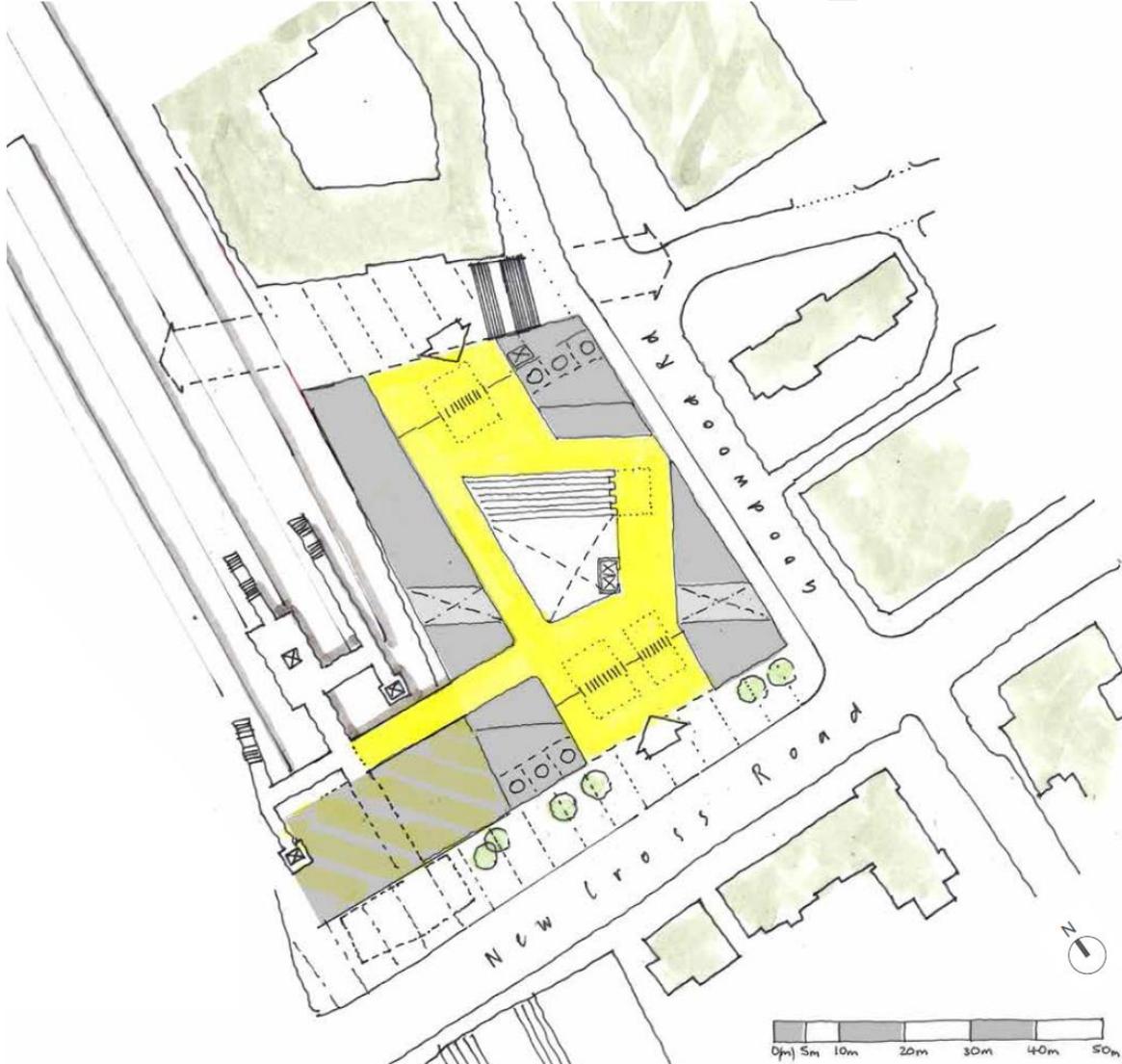
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Appendix A – Diagrams of the TfL and Alternative Station Option proposed by Sainsbury

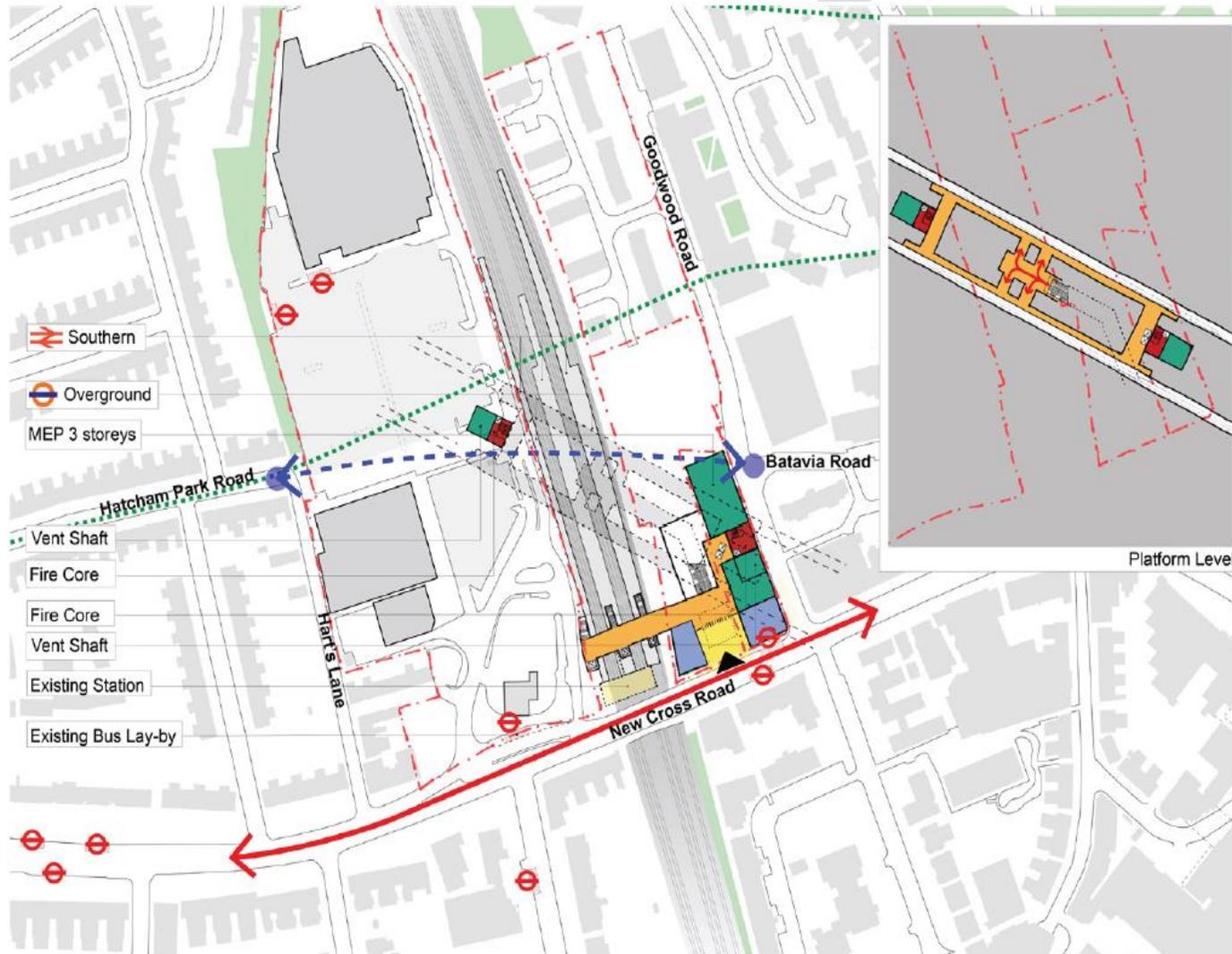
TfL Consulted Proposal



Alternative Station Option proposed by Sainsbury's and Mount Anvil



TfL Developed Option based on Sainsbury's and Mount Anvil Proposal



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Appendix B – Aspects where no significant difference was found between station options

The following aspects were considered in the assessment of options but were not determined to present a material difference between them.

Local Connectivity:

- 1 Strategic walk network
- 2 Strategic cycle network
- 3 Impact on Public Transport Accessibility Level
- 4 Connectivity to existing and planned communities
- 5 Step free interchange delivery

Impacts on operations

- 6 Noise and vibration
- 7 Rail alignment

Cost of operations

- 8 Station staffing costs
- 9 Train service operating costs

Impact of construction

- 10 Station sizing requirements to meet passenger demand forecasts
- 11 Rail alignment construction costs