

TRANSPORT FOR LONDON

M25 JUNCTION 28 IMPROVEMENTS – DEADLINE 4 SUBMISSION

17 MARCH 2021

1. Introduction

- 1.1 This document summarises the oral submissions made by Transport for London ('TfL') at the Compulsory Acquisition Hearing and Issue Specific Hearings held in week commencing 1 March 2021 in relation to the application for development consent by Highways England ('the Applicant') for the M25 Junction 28 improvements scheme ('the scheme').
- 1.2 Oral submissions by all parties attending the hearings were made pursuant to the agendas published by the Examining Authority ('ExA'). In setting out TfL's position on the issues raised in the agenda, as submitted orally at the hearings, the format of this submission follows that of the agendas. TfL has also commented on points raised by interested parties or the ExA during the hearings on which TfL did not make oral submissions, where these are relevant to TfL's responsibilities.
- 1.3 In addition to covering the agenda items as noted above, this submission also relates to the ExA's lists of action points arising from the hearings. Three action points are relevant to TfL, with these referred to in this submission under the relevant agenda items and further supporting information provided in the appendices to this submission.
- 1.4 Sections 5 to 7 of this document address other matters for which responses are required at Deadline 4, which were not specifically covered at the hearings.

2. Compulsory Acquisition Hearing

2.1 Introduction

- 2.1.1 A Compulsory Acquisition Hearing was held on Monday 1 March 2021. TfL was represented by:

- Charles Clarke, Principal Lawyer, TfL
- Harry Younger, Operational Property Manager, TfL
- Matthew Rheinberg, Major Projects Manager, TfL

2.2 Agenda Item 7 – Any other business

- 2.2.1 Issues regarding plots of land where TfL has an interest were raised as part of any other business at the the hearing.
- 2.2.2 TfL was pleased to see some progress has been made with the draft Land Plans and Book of Reference submitted by the Applicant at Deadline 3a, but unfortunately the changes do not address all of the issues that TfL has raised in relation to compulsory purchase. TfL has remaining concerns over three plots (1/1a, 1/3 and 1/6), where TfL is either the owner or occupier as highway authority.

Plot 1/1

- 2.2.3 TfL stated at the hearing that it was pleased to see that plot 1/1 has now been split into several plots reducing the nature of the rights being sought over plots 1/1, 1/1b, 1/1c and 1/1d, however concern remains over the extent of the permanent rights sought in plot 1/1a and

why the plot and the rights sought extend for such a length of the A12 eastbound carriageway. As TfL is the highway authority here and will remain so following completion of the scheme, the only reason TfL was aware of the potential need for the permanent acquisition of rights in this location was in relation to the Cadent Gas diversion (Work No. 29) which affects only a small part of the plot. Even with the Cadent Gas diversion, it is arguable that rights for this, so far as they affect the highway, could be covered by the rights of undertakers under the New Roads and Street Works Act 1991 (NRSWA) which still applies to works required as part of the scheme albeit amended by the draft DCO.

- 2.2.4 Since the Compulsory Acquisition Hearing, TfL has discussed the rights sought further with the Applicant. The Applicant has advised that the permanent rights sought for plot I/1a relate to utility diversionary works and drainage. However, it remains unclear why the Applicant needs a permanent right for the diversion of utilities within the existing highway and cannot rely on rights secured pursuant to the NRSWA rather than a permanent property right. TfL further requires clarity on whether it is the intention of the Applicant to transfer the benefit of any permanent rights sought to third party utility providers, and if so to which organisations.
- 2.2.5 TfL also notes that the draft DCO submitted at Deadline 3a did not include an update to Schedule 6 to cover the split of plot I/1 and the original wording of the rights required for plot I/1 does not refer to utility diversions (other than Cadent Gas) or to rights relating to drainage. The schedules to the DCO need to be updated to reflect the updated Land Plans being submitted and the rights being sought.

Plot I/3

- 2.2.6 At the hearing, TfL explained that the second plot TfL has concern over is plot I/3. The Applicant is seeking a right of permanent acquisition of this plot. Most, if not all, of plot I/3 will be incorporated into works for the new eastbound A12 off slip road that the Applicant is asking TfL to take responsibility for. If TfL is to take responsibility for the replacement off slip road (a matter discussed in Issue Specific Hearing 2 and covered in Section 4.2 of this submission), then TfL would expect to continue to hold the freehold interest in all land associated with the replacement off slip road and for which TfL would become responsible. TfL therefore does not see why the Applicant requires permanent acquisition of plot I/3 and a right of temporary possession should suffice.
- 2.2.7 The Applicant acknowledged at the hearing that it was not seeking to obtain rights it does not need and that it could seek permanent rights over plot I/3 rather than permanent acquisition. The Applicant also noted that part of plot I/3 included part of the new private means of access for the purpose of maintaining the scheme. Action Point 9 arising from the hearing (reference EV-015) was for the Applicant and TfL to consider the compulsory acquisition of this plot further and, if necessary, the powers sought for plot I/3 should be updated from acquisition of the freehold to acquisition of new rights.
- 2.2.8 In further discussions since the hearing to address Action Point 9, the Applicant has indicated that it now intends to seek permanent rights over this plot rather than permanent acquisition in order to seek powers to undertake utility works as well as provision of the private means of access. However, TfL expects that this plot should be split so that permanent acquisition is included for the land required for the private access road towards the western end of the plot. If TfL takes on responsibility for the new A12 eastbound off slip road, TfL does not wish to have ownership of land that is not to be part of the TfL Road Network (TLRN) or land that is not needed for maintenance of the TLRN.

2.2.9 In relation to the remainder of plot I/3, TfL needs to understand the utility works that are referred to (other than the Cadent Gas diversion – Work No. 29) that fall within plot I/3 and whether these relate to the whole of the remainder of the plot. Similar to plot I/1a, TfL again needs to understand which organisations the Applicant is proposing to acquire permanent rights for (again presumably by way of an easement). This is because TfL will be subject to those rights once acquired (assuming TfL is responsible for the new A12 eastbound off slip road) and any rights will be within the highway boundary once it is designated as such. TfL would usually grant such rights subject to necessary conditions to protect the existing highway (and in this case the new highway). If the Applicant acquired those rights through compulsory purchase powers, it may not be possible to impose such conditions on the third parties which would leave the TLRN insufficiently protected.

Plot I/6

2.2.10 The final plot in which TfL has an interest that was discussed at the Compulsory Acquisition Hearing is plot I/6. It was not clear to TfL why the Applicant needs any permanent rights over this plot following completion of the scheme as TfL will remain the highway authority for the A12 westbound on slip road.

2.2.11 Since the hearing, the Applicant has provided further explanation to TfL about why permanent rights are required, which is in order for the Applicant to secure access to an existing drainage channel and outfall associated with the A12 for ongoing maintenance. While this drainage channel will remain the responsibility of TfL, modifications are planned as part of the scheme so that the existing A12 drainage is used to drain the new loop road between Grove Bridge and where the loop road merges with the A12. While TfL considers that the need for the Applicant to maintain the drainage is minimal given that TfL will need to satisfactorily maintain its own drainage anyway, TfL understands the reason why the rights are being sought and is therefore now satisfied with the approach being taken by the Applicant for this plot.

3. Issue Specific Hearing I: Environmental matters

3.1 Introduction

3.1.1 Issue Specific Hearing I was held on Wednesday 3 and Thursday 4 March 2021. TfL was represented by:

- Matthew Rheinberg, Major Projects Manager, TfL
- Steen Smedegaard, Principal Lawyer, TfL

3.1.2 TfL primarily raised issues associated with traffic and transport, but points made in relation to other environmental topics are also covered in this submission, organised according to the hearing agenda.

3.2 Agenda Item 2.1 – Traffic and transport: Baseline data presented in the Transport Assessment Report [APP-098] and Transport Assessment Supplementary Information Report submitted by the Applicant at Procedural Deadline B [PDB-003]

3.2.1 TfL confirmed that it had no concerns over the baseline data comprising the traffic surveys and base year modelling upon which the future year modelling is based. TfL's concerns are more associated with the future year forecasts, discussed in section 3.3 of this submission.

3.2.2 Some confusion over the journey times presented in the Transport Assessment were also discussed at the hearing, with the Applicant acknowledging in response to questions from the ExA that the descriptions of the data being presented could have been clearer. TfL explained that concerns previously raised in its Written Representation over the delays

remaining on the A1023 approach to Brook Street following completion of the scheme (reference REP2-036 paragraph 7.18) had been based on an assumption that the journey time data presented by the Applicant for this route included substantial delays at the Junction 28 roundabout. The Applicant explained in its response to Written Representations (reference REP3A-022 table row REP2-036-58) that delays at the roundabout represented less than three minutes of the 23 minutes journey time on the relevant route during the 2037 AM peak period. On this basis, TfL is now satisfied that delays on the A1023 approach to the roundabout are forecast to not be substantial provided an extended inter-green phase is provided at the adjacent traffic signals (see section 3.4 of this submission).

3.3 Agenda Item 2.2 – Traffic and transport: Whether an assessment on the Proposed Development at Gallows Corner is required and if so, the likely effects the Proposed Development would cause

- 3.3.1 TfL stated at the hearing that it had assessed the future year forecasts in detail to review the forecast impact of the scheme on traffic flows at Gallows Corner and elsewhere on the TLRN and local road network. The forecasts using the core growth assumptions do not demonstrate a substantial impact on Gallows Corner, with the maximum increase in traffic approximately 75 additional vehicles on the A12 approaching the junction.
- 3.3.2 One of the growth scenarios presented in the Transport Assessment Supplementary Information Report (reference PDB-003 Figure 5-4) shows a much more substantial increase in traffic approaching Gallows Corner, with over 200 additional vehicles (a 9 per cent increase) in the 2037 PM peak hour for the low growth scenario. However, with reductions in traffic on some other arms of the junction, the overall percentage increase in traffic forecast at Gallows Corner is lower.
- 3.3.3 TfL has raised concerns about the methodology used by the Applicant to assess background growth in the model. The Applicant has based its growth forecasts on the National Trip End Model (NTEM) with an uncertainty log used to include additional developments in the model where they are ‘near certain’ or ‘more than likely’ within close proximity to the DCO boundary. No developments more than 3 km from the DCO boundary are included. TfL has concerns about this approach: as an example Gallows Corner is 3 km from the DCO boundary, so any developments immediately west of Gallows Corner would be excluded from the model.
- 3.3.4 TfL recognises that deriving growth forecasts from the NTEM is an appropriate approach for forecasting future demand outside London. TfL considers that it would have been more appropriate to base growth within London on the forecasts in the London Plan, which contains adopted policy targets for housing and employment growth. The uncertainty log used by the applicant includes only 13 developments in Havering, almost all of which are employment sites rather than residential; the London Plan would have included a more realistic level of growth.
- 3.3.5 While TfL believes a more detailed methodology for the local area should have been adopted and ideally TfL would like to see the outputs of sensitivity tests undertaken using such a methodology, TfL considers it likely that this would not significantly change the forecast impact of the scheme on traffic patterns and therefore would not result in a substantial change in environmental impacts forecast. Nevertheless it would be more appropriate for this to have been robustly demonstrated rather than TfL and other interested parties needing to assume this is the case.
- 3.3.6 The impact of the Lower Thames Crossing (‘LTC’) scheme on traffic flows at M25 Junction 28 was also discussed under this agenda item. While they cannot be directly compared, TfL

is concerned that the forecast flows on the M25 reported in the LTC Traffic Forecasting Report published as part of the 2018 Statutory Consultation for that scheme are substantially higher than the equivalent flows in the traffic model for the M25 Junction 28 scheme. This could mean that if the M25 is busier as a result of the LTC scheme, the net traffic impacts of the Proposed Development could be different.

- 3.3.7 The Applicant explained at the hearing that the LTC modelling has moved on since the version that was used to inform the modelling of the scheme. The Applicant also stated that it recognised that the M25 over the Junction 28 viaduct will be close to capacity in the future and that it is considering future options for addressing capacity between Junctions 27 and 29 of the M25. In the Applicant's response to Written Representations (reference REP3A-022 table row REP2-036-62a), it stated that some level of future proofing has been included in the design of the scheme to ensure that additional lanes on the M25 or other options to address capacity constraints would not require substantial modifications to Junction 28. This has provided TfL with some reassurance on this matter but TfL would again have expected that the Applicant should have demonstrated more robustly that the environmental impacts of the scheme do not change with higher traffic flows caused by the LTC scheme, beyond the high growth sensitivity test presented in the Transport Assessment Supplementary Information Report (reference PDB-003).
- 3.4 **Agenda Item 2.3 – Traffic and transport: Extended inter-green signalling at Brook Street presented within the Transport Assessment Supplementary Information Report [PDB-003]**
- 3.4.1 TfL set out its position at the hearing regarding the extended inter-green time for the traffic signals at the top of the A12 westbound off slip which reduces delays for traffic on the A1023 Brook Street approach to the roundabout but is not currently part of the scheme.
- 3.4.2 While the A1023 Brook Street approach to the Junction 28 roundabout is not within London, TfL has an interest in congestion and delays on this route because the TfL bus route 498 operates along this corridor. TfL has significant concerns about the substantial forecast future delays on this route and the impact this will have on the performance of the bus route and its attractiveness for passengers.
- 3.4.3 The Applicant's modelling as set out in the Transport Assessment (reference APP-098 sections 5.6 and 5.8) demonstrated that as originally forecast, the scheme would cause a worsening of journey times by nearly nine minutes in 2037. This is of substantial concern to TfL. TfL therefore welcomed the lengthening of intergreen times presented in the Transport Assessment Supplementary Information Report (reference PDB-003 section 2.3) – this resulted in an improvement in journey times by around four minutes, compared to the worsening by nine minutes without the change to intergreen times.
- 3.4.4 It is therefore critical to TfL that this improvement in journey times is secured through the DCO. TfL had suggested that this could be secured by incorporating changes to signal timings into the works set out in Schedule I of the draft DCO. However, the Applicant disagreed in its response to TfL's Deadline 3a submission (reference REP3B-004 table row REP3A-046-10), stating that placing a statutory requirement on the Applicant regarding how to manage the Strategic Road Network with regard to signal timings is not appropriate or necessary and could fetter the Applicant's ability to undertake its functions appropriately.
- 3.4.5 For the avoidance of doubt, TfL is not seeking for precise signal timings to be specified in the DCO, but given the scale of impact that the changes to signal timings provide, the improvement to journey times on the A1023 approach to the roundabout needs to be secured in some way.

- 3.4.6 The ExA has asked the Applicant and TfL to explore further whether the intergreen signalling should be secured in the DCO or as part of a separate legal agreement in Action Point 2 (reference EV-032). TfL and the Applicant have since discussed this issue and agreed that however this is secured, any wording should focus on the output required, i.e. the scheme not increasing delays on the A1023 Brook Street approach to the roundabout, rather than the method of achieving that outcome.
- 3.4.7 TfL seeks that this matter be addressed through introduction of a new requirement into Schedule 2 of the DCO. The proposed wording of that requirement is set out in Appendix A of this submission.
- 3.5 **Agenda Item 2.4 – Traffic and transport: The absence of an outline Traffic Management Plan (TA I.I) and whether sufficient information is contained within the Supplementary Information Reported [PDB-003]**
- 3.5.1 TfL welcomes the Applicant's commitment to submit an outline Traffic Management Plan (TMP) at Deadline 4. At the hearing, TfL set out the information TfL would expect to see included in the outline TMP:
- whether any lane closures or more significant disruption on the A12 is required, given that the Applicant is seeking to secure rights over sections of the A12 carriageway to facilitate utility diversions and other works;
 - the number and duration of night and weekend closures on the A12 eastbound off slip road, given the disruption these will cause to users of the A12 and local residents;
 - whether measures will be put in place to ensure escorted passage of emergency vehicles through any closures of the A12 eastbound off slip road;
 - the diversion routes for general traffic and buses during any such closures; and
 - whether any co-ordination with other works that may be taking place concurrently on the A12 or A127 is required.
- 3.5.2 TfL will review the outline TMP once it has been submitted and will provide any comments to the ExA and the Applicant.
- 3.6 **Agenda Item 2.5 – Traffic and transport: Matters concerning connectivity to non-vehicular traffic and community severance following the Applicant's response to WQ TA I.II and TA I.I2**
- 3.6.1 TfL stated its agreement with points raised by the London Borough of Havering and Essex County Council at the hearing regarding the need to improve the route for Non Motorised Users (NMUs) through M25 Junction 28. In particular, while TfL acknowledges that the Applicant is seeking funds separately to deliver improvements to the corridor as a whole, the Junction 28 roundabout sits in the middle of this corridor and the Applicant must demonstrate that a safe crossing of the new A12 eastbound off slip road for NMUs is provided, to demonstrate compliance with paragraph 3.17 of the National Policy Statement for National Networks covering the need for applicants to identify opportunities to invest in infrastructure for pedestrians and cyclists in locations where the national road network causes severance.
- 3.6.2 TfL supports the securing of improvements to the NMU route in the DCO.
- 3.7 **Agenda Item 2.6 – Traffic and transport: Suggested alterations to proposed access to and egress from Grove Farm prepared by representatives of the Jones Family submitted at Deadline 2 [REP2-033]**
- 3.7.1 TfL set out its views on the proposals for amendments to the access routes to Grove Farm that had been put forward at Deadline 2, noting that it did not wish to comment on the

proposed amendments to access from the northbound M25 on slip as this is a matter for the Applicant to consider.

- 3.7.2 TfL has no issue with the egress from Grove Farm being provided like-for-like, as currently proposed as part of the scheme, if TfL is to take responsibility for the new A12 eastbound off slip road. However, if this egress was converted to also provide an access into Grove Farm, with a left turn only lane provided, TfL considers that there would be an increase in safety related risks on the slip road.
- 3.7.3 The provision of a new access on a slip road may form a departure from the Design Manual for Roads and Bridges (DMRB) standard on the geometric design of grade separated junctions. The DMRB specifies that direct accesses and priority junctions shall not be provided.
- 3.7.4 TfL also notes the concerns raised by the Applicant about the potential for drivers to mistake access to Grove Farm with access to the northbound M25.
- 3.7.5 Considering these points, TfL is broadly in agreement with the Applicant's concerns about increased road safety risks associated with the Grove Farm access proposal, however it is for the Applicant to consider the overall road safety impacts of the proposal as a whole given this also affects road safety on the M25 northbound on slip.
- 3.8 **Agenda Item 4.1 – Design and landscaping: The adequacy of the design of the scheme, focussing on the bridges, following the Applicant's response to WQ LV 1.6 to 1.9 [REP2-011]**
- 3.8.1 TfL raised the point at the hearing that, while it recognises the importance of high quality design, this has to be balanced against both construction and ongoing maintenance costs. If TfL is required to take on responsibility for the new A12 eastbound off slip road then it would be concerned if the design of the retained embankment or other elements of the infrastructure was modified leading to substantially increased costs of maintaining the infrastructure. A balance needs to be struck between high quality design and impacts on public sector finances.
- 3.9 **Agenda Item 5.1 – People and communities: The effects of the Proposed Development on the living conditions of the occupiers of Grove Farm**
- 3.9.1 During the hearing, measures to reduce the impact of the scheme on Grove Farm were discussed. TfL noted that the proposal to move the egress from Grove Farm onto the new A12 eastbound off slip road further west raised potential safety concerns, as it would be further from the Junction 28 roundabout and vehicles would therefore be travelling faster. This would need to be assessed in detail if it was proposed for further consideration to determine whether there are any increased safety risks and how these could be mitigated.
- 3.9.2 TfL also noted the range of mitigation being considered on a section of road that is proposed to be transferred to TfL by the draft DCO. TfL does not agree to take on responsibility for the management and maintenance (including the related costs) of such mitigation measures. This reinforces TfL's position that it would be more appropriate for the Applicant to be responsible for the new slip road because it can then take full responsibility for the mitigation measures provided to address the impacts of its own scheme.
- 3.10 **Agenda Item 6.1 – Matters for clarification: Whether Interested Parties are generally content with the outline Construction and Environmental Management Plan (CEMP) submitted at Deadline 3A [REP3A-010] and the inclusion of the outline Dust, Noise and Nuisance Management Plan and the outline Surface Water Management Plan, and London Borough**

of Havering to expand on its comments on those other Environmental Plans as listed in the draft Development Consent Order [REP3A-004]

- 3.10.1 TfL set out its position on the draft CEMP at the hearing. Previously its main concern with the draft CEMP was that TfL was not going to be consulted, so TfL welcomed the modification to the draft DCO put forward by the Applicant at Deadline 2 which added the highway authority as a consultee. TfL is generally content with the CEMP provided that it is consulted on the relevant environmental control plans contained within it that are relevant to its activities
- 3.10.2 The outline Surface Water Management Plan, which is of relevance to TfL because the draft DCO proposes that TfL would take responsibility for some of the drainage assets delivered as part of the scheme, is very generic and while it sets a framework, it does not currently reflect the local situation and specific management that will be needed to any great extent. TfL therefore looks forward to reviewing the extra detail that needs to be provided by the Applicant as this plan is developed.
- 3.10.3 TfL is concerned that some of the environmental control plans are not being shared in outline form as part of the DCO examination – this does not give TfL the assurance it needs on certain matters. For example, there are some environmental control plans which may influence the planting in areas that TfL is being asked to maintain, i.e. the Ecological Habitats and Species Plan.
- 3.10.4 TfL also considers that it would be helpful if a Code of Construction Practice ('CoCP') was produced. While the Applicant has noted that some of the content of a CoCP is already included in the CEMP, the Register of Environmental Actions and Commitments, and various environmental control plans, TfL considers that it would be more appropriate if all of this information was collated into one document.
- 3.10.5 TfL also raised a concern regarding the obligation for the Applicant under Requirement 17 when submitting matters for approval under the requirements to the Secretary of State that it must include a summary report setting out the consultation undertaken. TfL's view is that the Applicant should also have an obligation to take into account comments made by consultees rather than just reporting to the Secretary of State what consultees have said.
- 3.11 Agenda Item 7 – Any other business**
- 3.11.1 TfL notes the discussion that took place at the hearing regarding the local deer population and the need to ensure fencing is put in place to reduce the likelihood of deer coming into contact with traffic. TfL seeks clarity on whether any deer fencing is proposed to be provided on TfL highway land and therefore whether TfL will be asked to maintain any such fencing.
- 3.11.2 TfL also seeks clarity on the overall strategy for the deer fencing. At the hearing the Applicant stated that the proposal was to stop deer fencing at the bottom of the new A12 eastbound off slip road. This would create a gap in deer fencing between the bottom of the slip road and Woodstock Avenue. TfL needs to be satisfied that the strategy does not result in deer establishing alternative routes and trying to cross the A12 in any unfenced areas between the bottom of the new off slip road and Woodstock Avenue.

4. Issue Specific Hearing 2: Development Consent Order

4.1 Introduction

4.1.1 Issue Specific Hearing 2 was held on Wednesday 3 and Thursday 4 March 2021. TfL was represented by:

- Toni Weston, Partner, Gowling WLG
- Charles Clarke, Principal Lawyer, TfL
- Matthew Rheinberg, Major Projects Manager, TfL

4.2 Agenda Item 2 – Ownership, management and maintenance responsibilities for Transport for London

4.2.1 TfL continues to have significant concerns about:

- (a) the proposal for TfL to take on responsibility for the new A12 eastbound off slip road; and
- (b) the interface of and effect of the scheme on the TLRN.

4.2.2 In terms of the new A12 eastbound off slip road, TfL's position remains that it does not wish to take on responsibility for the off slip road and considers that it would be simpler and more efficient if the Applicant maintained it in future. There are a number of reasons for this:

- (a) The new off slip road is a significantly longer and more complex structure than the existing off slip road, the latter being a relatively short slip road on an embankment. TfL is being asked to take on responsibility for structures over and above the existing off slip road including significant embankments, drainage systems, an attenuation pond, a large retaining structure supporting the eastern part of the new off slip road and a complex bridge interface with the new Maylands bridge. The scale of this new infrastructure is demonstrated by the photomontages provided by the Applicant, particularly those for Viewpoint A (reference AS-002 Figure 9.16) and Viewpoint B (reference AS-003 Figure 9.20).
- (b) In addition, there is some suggestion that the new off slip road may well be associated with a number of mitigation features required by the DCO but unrelated to the new off slip road itself and for which the Applicant, not TfL, should be responsible. This may include noise mitigation measures for Grove Farm and deer fencing along the slip road, as discussed in Sections 3.9 and 3.11 of this submission.
- (c) The new structures associated with the new off slip road are intrinsically linked with the new loop road between the northbound M25 and eastbound A12. Under the proposed split of responsibility set out in the draft DCO, it will be hard to properly split where responsibility for the new Maylands bridge ends and the new retaining structure for the eastern end of the slip road starts as the two are structurally linked together. As such, it is preferable for one organisation, namely the Applicant, to be responsible for future management and maintenance of both structures.
- (d) The Applicant has the expertise and is more than able to maintain the new off slip road. The Applicant already maintains the A12 eastbound on slip road and the A12 westbound off slip road which are situated on the east side of the motorway junction. It therefore already maintains two of the four exit and entry points onto the A12 at this junction.
- (e) The Applicant is already maintaining and will be maintaining further structures of a similar nature in the area including what will now be three additional bridges associated with the new M25 northbound to A12 eastbound loop road. As a result, TfL believes that

it will be more cost effective for the Applicant to build, repair and maintain these new structures as part of their Design, Build, Finance and Operate contract for the M25 rather than TfL build them into their highway maintenance contract for the TLRN. In that sense, the public purse will be better served by the Applicant taking responsibility for the new off slip road.

- (f) TfL is not funded to take on the additional cost of the operation and long term repair, maintenance and replacement of the new off slip road and its structures. The Applicant has not offered to compensate TfL in respect of the costs it will incur in taking on responsibility for the new off slip road.
- (g) Uncertainties around the split of maintenance responsibilities means that there is room for dispute between contractors appointed by the Applicant responsible for remedying construction defects and those contractors appointed by TfL responsible for day to day maintenance.
- (h) It is not possible to determine from the wording in the draft DCO what features TfL would be taking on responsibility for. The Applicant has not, to date, been able to provide any clarity on this. The draft DCO should not be made while such ambiguity remains.

- 4.2.3 TfL wrote to the Applicant on 4 November 2020 to confirm that it does not wish to take on responsibility for the new off slip road. The Applicant's response dated 29 December 2020 indicated that the Applicant was unwilling to consider any other arrangement than TfL taking on responsibility for the new off slip road. Since then, and following the discussion on the above matters at the hearings, TfL has increased concerns about the obligations and liability which it is being asked to take on responsibility for.
- 4.2.4 Given the Applicant's refusal to consider any alternatives and in an effort to move things forward, TfL previously but reluctantly indicated that it might be prepared to take on responsibility for the new off slip road if suitable arrangements are agreed and protections in favour of TfL are put in place.
- 4.2.5 However, there has been no meaningful response or engagement from the Applicant on this matter since. Again, in an attempt to move matters forward, TfL sent draft heads of terms for a legal agreement to the Applicant on 14 February 2021 setting out the terms on which TfL would be prepared to take on responsibility for the new off slip road.
- 4.2.6 A response to the heads of terms was received from the Applicant to TfL's proposed heads of terms on 16 March 2021 but TfL has had insufficient time to digest this response prior to making this submission at Deadline 4. However, it appears that there remains disagreement over key principles relating to taking responsibility for the new off slip road. TfL's position therefore continues to be that the new off slip road should be the responsibility of the Applicant and that if responsibility for the new off slip road is imposed on TfL then TfL will require the amendments to the DCO set out in Appendices A and B.
- 4.2.7 As for the interface of and effect of the scheme on TfL's existing highway network, TfL remains concerned that insufficient progress has been made with the Applicant in addressing operational issues in relation to the construction of the scheme and the impact of the scheme on the TLRN.
- 4.2.8 TfL indicated at the hearings that it considers that its concerns can be addressed through protections in favour of TfL being built into the draft DCO or through completion of a legal agreement between TfL and the Applicant, together with a commitment from the Applicant and TfL to continuing active ongoing dialogue both prior to and during construction of the scheme. Given the lack of progress made to date on a legal agreement,

TfL now considers that the preferred option must be for protections to be built into the draft DCO as it may not be possible to conclude a legal agreement in good time to inform the Examination process.

- 4.2.9 The ExA asked TfL in Action Point I from the hearing (reference EV-037) to submit a draft version of the protective provisions it is seeking into the Examination at Deadline 4. The protective provisions sought by TfL are set out in Appendix B of this submission.
- 4.2.10 In the event that TfL is required to take on responsibility for the new A12 eastbound off slip road, all of the protective provisions are required. If TfL is not required to take on responsibility for the new A12 eastbound off slip road then it may be that some of the protective provisions (for example paragraphs 24 and 25) will not be required. It should be noted that in preparing the draft protective provisions it seeks, TfL has had regard to the precedent protective provision wording in favour of the local highway authority in the A303 Sparkford to Ilchester Dualling DCO 2021.
- 4.2.11 TfL would be happy to submit an explanatory statement of the changes proposed to the DCO including the proposed Protective Provisions should this be of assistance to the ExA.
- 4.2.12 TfL reserves the right to add to or amend Appendices A and B of this submission following further information being provided or in light of any further discussions with the Applicant.
- 4.3 **Agenda Item 3 – Matters of concern raised with the draft DCO**
- 4.3.1 In addition to the matter already raised above, TfL seeks further changes to the draft DCO as set out in Appendix A of this submission.

5. Comments on responses for Deadlines 3a and 3b

- 5.1 TfL has reviewed all submissions made at Deadlines 3a and 3b and is satisfied that any issues arising have been addressed either at the hearings or elsewhere in this submission. TfL therefore does not wish to make any further comments.

6. Comments on the Applicant's draft Itinerary for the Accompanied Site Inspection

- 6.1 TfL has reviewed the proposed itinerary for the Accompanied Site Inspection and is satisfied that all relevant locations of concern to TfL have been covered. TfL therefore does not wish to suggest any amendments to the itinerary.

7. Request to make changes to the original application

- 7.1 The ExA wrote to Interested Parties and Statutory Parties on 26 February 2021 (reference PD-012) seeking views at Deadline 4 on whether Change Request No. 2 (amendment to the surplus construction materials deposit situated to the south east of Maylands Golf Course to form an environmental bund) and Change Request No. 3 (refinement of Maylands Golf Course accommodation works) made by the Applicant constitute a material change to the application, either individually or cumulatively. The ExA also asks whether or not the changes fall within the scope and assessment of the Environmental Statement.
- 7.2 These changes do not impact on TfL's current or potential future land interests or responsibilities and TfL therefore does not consider it appropriate to comment on this matter.

Appendix A

Amendments to the Draft DCO (as submitted at Deadline 3a)

Article/Schedule	Amendment sought by TfL	Reasons
Article 2(l)	Insert new definition: “the 1973 Act” means the Land Compensation Act 1973	Connected with proposed new Article 3l
Article 1l(4)	Insertion of reference to the exact split of responsibility on either side of any bridge – in the case of Maylands Bridge this could be by reference to a plan	To provide clarity that the Applicant will be responsible for any structure either side of the bridge which is supporting any bridge (i.e. Maylands Bridge)
Article 16(l)(b)	Requirement for division of responsibility between the Applicant and TfL to be agreed by reference to a plan and schedule	To clarify the extent of the responsibility of the Applicant and/or TfL Reference to points on the streets, rights of way and access plans does not adequately define the split and scope of responsibility for features connected with the new A12 eastbound off slip road outside the new highway surface itself, e.g. structures and attenuation ponds
Article 16(l)(b)	Requirement for TfL to become responsible for the A12 Eastbound Off Slip Road to be conditional on the Applicant transferring or granting to TfL the necessary land interests and rights to operate and maintain the same including access	To ensure that responsibility does not pass to TfL without TfL having what it requires to operate and maintain the road
Article 18(1l)	Change 28 days to 56 days	To ensure that the traffic authority has sufficient time to review the details and make a decision
Article 19(9)	Change 28 days to 56 days	To ensure that there is sufficient time to review details and give consent
Article 22(2)	Change 14 days to 28 days	To ensure that access requirements can be accommodated
Article 35(2)	Change 14 days to 28 days	To provide ample notice and to ensure that possession can be accommodated

New Article 31	<p>Insert new article:</p> <p>Modification of Part I of the 1973 Act</p> <p>31 Part I of the 1973 Act insofar as it applies to the authorised development shall have effect as if “the appropriate highway authority” means the undertaker and “public works” means the authorised development</p>	To ensure that the undertaker is responsible for compensation claims under Part I of the Land Compensation Act 1973 relating to the authorised development despite part of the authorised development becoming a GLA Road on completion
Schedule 2 Part I Requirement 3(l)	TfL to be consulted on matters relating to its function or in respect of assets which TfL is required to take responsibility for	To protect TfL as highway authority and to ensure that TfL has input into the design of the assets for which it will be responsible
Schedule 2 Part I Requirement 4(2)	Add Code of Construction Practice	To require the Applicant to prepare a Code as part of the CEMP to collate the necessary information in one document
Schedule 2 Part I Requirement 4(4)	TfL to be consulted on matters relating to its function or in respect of assets which TfL is required to take responsibility for	To ensure that TfL has input into the maintenance of the assets for which it will be responsible
Schedule 2 Part I Requirement 5(l)	TfL to be consulted on matters relating to its function or in respect of land/assets which TfL is required to take responsibility for	To protect TfL as highway authority and to ensure that TfL has input into the design of the land/assets for which it will be responsible
Schedule 2 Part I Requirement 6(l)	TfL to be consulted on matters relating to its function or in respect of land/assets which TfL is required to take responsibility for	To protect TfL as highway authority and to ensure that TfL has input into the design of the land/assets for which it will be responsible
Schedule 2 Part I Requirement 8(l)	TfL to be consulted on matters relating to its function or in respect of land/assets which TfL is required to take responsibility for	To protect TfL as highway authority and to ensure that TfL has input into the design of the land/assets for which it will be responsible
Schedule 2 Part I Requirement 10(l)	Reference to the traffic management plan being in accordance with the outline traffic management plan	TfL understands that an outline traffic management plan is to be submitted into the Examination by the Applicant. It is therefore expected that the final traffic management plan will be based on the outline

Schedule 2 Part 1 Requirement 12	TfL to be consulted on departures from the Manual of Contract Documents for Highway Works where such fencing relates to its function or in respect of land/assets which TfL is required to take responsibility for	To protect TfL as highway authority and to ensure that TfL has input into the design of the land/assets for which it will be responsible
Schedule 2 Part 2 Paragraph 15	Certified documents should also be made available on the register	To ensure that all relevant information is publicly available
Schedule 2 Part 2 Paragraph 17	Consultation to be no less than 28 days Additional wording to be added to require the undertaker to have regard to the consultation responses received	To ensure that there is sufficient time to provide a meaningful response and to ensure that responses are taken into account
Schedule 2 Part 2	Insertion of a new requirement to read: (1) No part of the authorised development is to open to traffic until an operating plan for the M25 Junction 28 roundabout has been submitted to and approved in writing by the Secretary of State, following consultation with the local highway authorities, such plan to include details of the proposed operation of traffic signals timings or such other measures as may be necessary to secure that delays to traffic on the A1023 Brook Street approach to the M25 Junction 28 roundabout do not increase as a result of the authorised development. (2) The authorised development must be operated in accordance with the approved operating plan referred to in sub-paragraph (1) or such amended plan as may be agreed with the local highway authorities.	To ensure that delays to traffic on the A1023 Brook Street approach to the M25 Junction 28 roundabout do not increase as a result of the scheme
Schedule 4 Part 2	The first line of the table should be deleted	TfL is already the highway authority for the A12 eastbound, and it does not therefore need to be designated

Schedule 4 Part 2	Requirement for division of responsibility between the Applicant and TfL to be agreed by reference to a plan and schedule	Reference to points on the streets, rights of way and access plans does not adequately define the split and scope of responsibility between TfL and the Applicant for features connected with the new A12 Eastbound Off Slip Road outside the new highway surface itself, e.g. structures and attenuation ponds
Schedule 6	To be updated to reflect the updated land plans and Book of Reference	To ensure that the DCO, land plans and Book of Reference are consistent

Appendix B

TfL's Proposed Protective Provisions

PART 5

FOR THE PROTECTION OF TRANSPORT FOR LONDON

1. The provisions of this Part of this Schedule have effect unless otherwise agreed in writing between the undertaker and Transport for London.

Definitions

2. In this Part of this Schedule:

"A12 Eastbound Off Slip Road" means that part of the authorised development comprising the A12 eastbound off slip road as described in Schedule 1 of the Order and shown between points 1/10 and 1/11 on sheet 1 of the streets, rights of way and access plans;

"Commuted Sum" means the sum to be paid by the undertaker to Transport for London for the future maintenance of the Highway Assets not previously forming part of the TLRN which will be transferred to Transport for London, as calculated in accordance with paragraph 27 of this Part of this Schedule but which will exclude any costs recovered under paragraph 26(b) of this Part of this Schedule;

"Design Detailing" in relation to any Works, means any detailed design or amended detailed design relating to those Works which is approved pursuant to the Order or by the Secretary of State pursuant to requirement 3;

"Detailed Information" means the following drawings, specifications and other information relating to TfL Roads, which must be in accordance with the Design Detailing -

- (a) boundary, environmental and mitigation fencing;
- (b) road restraint systems (vehicle and pedestrian);
- (c) drainage and ducting;
- (d) earthworks;
- (e) road pavements;
- (f) kerbs, footways and paved areas;
- (g) traffic signs and road markings;
- (h) road lighting (including columns and brackets);

- (i) electrical work for road lighting and traffic signs;
- (j) highway structures;
- (k) landscaping, planting and any boundary features which will form part of the TLRN;
- (l) utility diversions;
- (m) a schedule of timings for the works, including dates and durations for any closures of any part of the TLRN;
- (n) traffic management proposals including any diversionary routes;
- (o) a schedule of condition of all TfL Roads within the Order limits; and
- (p) where TLRN is occupied under this Order in connection with any Works but is not itself subject to Works, specification of the condition in which the TLRN will be returned post occupation;

"Detailed Local Operating Agreement" means an agreement made pursuant to paragraph 4 of this Part of this Schedule;

"Highway Assets" means highway assets which Transport for London will become responsible for maintaining and which incur maintenance costs;

"Maintenance Schedule" means a schedule and plan setting out which parts of the authorised development are proposed to be the maintenance responsibility of Transport for London;

"Other Detailed Information" means -

- (q) a schedule of timings for the Works, including dates and durations of any closures of any part of the TLRN;
- (r) traffic management proposals, including any diversionary routes and any Detailed Local Operating Agreement;
- (s) a schedule of condition of the affected TLRN within the Order limits; and
- (t) where the TLRN is occupied under this Order in connection with the Works but Works are not undertaken on, to or under the TLRN, a specification of the condition in which the TLRN will be returned after the occupation has finished;

"Provisional Certificate" means a certificate issued to certify that the Works to which the certificate relates have been completed in accordance with this Part of this Schedule and are ready for use for public traffic;

"TfL Road" means any public, vehicular highway which is vested or vests or is intended at the completion of Works to vest in or be otherwise maintainable by Transport for London, including for the avoidance of doubt the A12 Eastbound Off Slip Road;

"TLRN" means the Transport for London Road Network comprising highways for which Transport for London is the responsible highway authority; and

"Works" means any works authorised by this Order undertaken on, to or under any part of the TLRN or a TfL Road.

Commencement of the Works

3. Before commencing the construction of, or the carrying out of any work authorised by this Order which involves interference with a TfL Road (including interference with the use by the public of a TfL Road and temporary or permanent stopping up of any part of a TfL Road), the undertaker must provide to Transport for London the Detailed Information relating to the interference, and the Works must not be carried out except in accordance with the Detailed Information submitted to Transport for London or as otherwise agreed between the undertaker and Transport for London.
4. (1) Before commencing the construction of, or the carrying out of any work authorised by this Order which involves interference with a TfL Road (including interference with the use by the public of a TfL Road and temporary or permanent stopping up of any part of a TfL Road), the undertaker must agree with Transport for London a Detailed Local Operating Agreement covering the following -
 - (a) communications and customer care: communication with stakeholders and identification of which party is responsible for each activity;
 - (b) operational areas – scheme operational areas: definitions and scheme extents for the works areas, zone of influence and Free Recovery Area;
 - (c) asset handover: describing the scheme existing assets and activities to be undertaken to enable commencement and completion of Works, and the party responsible for each;
 - (d) asset inspection;
 - (e) routine maintenance and repair;
 - (f) winter maintenance and severe weather;
 - (g) continuity of technology;
 - (h) occupancy management;
 - (i) incidents;
 - (j) traffic management: provides the key activities to be undertaken with regard to the design, installation, maintenance and removal of Traffic Management; and
 - (k) claims made by and against the undertaker.

- (2) Any agreement completed under sub-paragraph (1) must continue in force until the completion of the Works or the removal of the undertaker from all TfL Roads, whichever is the earlier.
- (3) Where agreement cannot be reached under sub-paragraph (1), the terms of the detailed local operating agreement will be resolved by arbitration under article 54 (arbitration).
5. (1) Before commencing the construction of, or the carrying out of any Works the undertaker must provide to Transport for London the Design Detailing and the Other Detailed Information relating to those Works.
- (2) The undertaker must not commence construction of, or the carrying out of the Works in question until approval has been given by Transport for London to the Other Detailed Information or the Other Detailed Information has otherwise been agreed in writing between the undertaker and Transport for London.
- (3) The Works must not be constructed except in accordance with the Other Detailed Information as may be approved or agreed in accordance with sub-paragraph (2).
- (4) If within 28 days after the Other Detailed Information has been submitted Transport for London has not approved or disapproved it or it has not been otherwise agreed, Transport for London is deemed to have approved it as submitted.
6. (1) The undertaker will design and construct all Works affecting TfL Roads in accordance with standards contained in the appropriate parts of the Design Manual for Roads and Bridges ('DMRB').
- (2) The undertaker must not commence construction of, or the carrying out of, any Works that are a departure from the standards contained in the DMRB until the approval has been given by Transport for London.
- (3) The undertaker will allow and facilitate an appropriately qualified person on behalf of Transport for London to participate in the design process for the detailed design of those parts of the authorised development which are TfL Roads, and will have reasonable regard to any views of that person in finalising the detailed design prior to any element reaching design fix or freeze; provided always that it will be the decision of the undertaker whether it implements such views and for the avoidance of doubt any such view shared by the person will not be an instruction, requirement or authorisation under this Order.
- (4) Participation under sub-paragraph (1) will be in the form of invitations to attend design meetings not less than once per calendar month and the provision to Transport for London of such drawings, cross sections and design proposals as are required to allow Transport for London to provide views on detailed design proposals to the undertaker.

Inspection of the Works

7. (1) Any person duly appointed by Transport for London for the purpose may at all reasonable times, subject to any necessary and reasonable health and safety restrictions imposed by the undertaker, enter upon and inspect any part of the authorised development which:

- (a) is in, over, under or adjacent to any TfL Road, or
- (b) may affect any highway or any property of Transport for London,

during the carrying out of the Works, and the undertaker must give to such officer all reasonable facilities for such inspection.

(2) The testing of materials used in any Works affecting TfL Roads must be carried out at the expense of the undertaker in accordance with the Manual of Contract Documents for Highway Works Appendix 1/5 (Specification for Highway Works). Transport for London must receive copies of all test certificates and results which have been requested by it in writing as soon as reasonably practicable. Notwithstanding the foregoing, Transport for London has full power to test all or any materials used or proposed to be used in any work to TfL Roads at its own expense and the undertaker must provide such information and materials as is reasonably necessary to facilitate such testing.

(3) The undertaker must not alter, disturb or in any way interfere with any property of Transport for London on or under the TLRN, or the access thereto (except to the extent authorised under the powers conferred by this Order), without the prior written consent of Transport for London.

Safety Audits

8. (1) The undertaker must procure that an appropriately qualified safety auditor undertakes road safety audit stages 3 and 4 on the Works including any Works to TfL Roads in accordance with DMRB Volume 5 Section 2 Part 2 (GG 119) or any replacement or modification of that standard and must provide copies of the reports of such audits to Transport for London.

(2) Transport for London must be invited to participate in the stage 3 and 4 road safety audits conducted under sub-paragraph (1).

(3) Where the report of the stage 3 road safety audit identifies any recommended works to a TfL Road, the undertaker must use reasonable endeavours to agree with Transport for London which works or alternative proposals require to be implemented, provided that no works may be implemented which would give rise to any new or materially different environmental effects in comparison with those identified in the Environmental Statement.

(4) Where the report of the stage 4 road safety audit identifies any recommended works to a TfL Road, the undertaker must use reasonable endeavours to agree with Transport for London which works or alternative proposals require to be implemented.

(5) Any works which the undertaker considers are required to be carried out to a TfL Road in accordance with the report of the stage 3 or stage 4 road safety audit, which works may not

give rise to any new or materially different environmental effects in comparison with those identified in the Environmental Statement, must be undertaken by and at the expense of the undertaker to the reasonable satisfaction of Transport for London.

(6) The undertaker must use reasonable endeavours to agree with Transport for London a programme for any works to be carried out under sub-paragraph (5), which programme must include timing of any closures of any part of the highway, traffic management arrangements, signage and diversion routes where required.

(7) The carrying out of works under sub-paragraph (5) are to be taken to be works carried under this Order.

(8) Where, agreement cannot be reached under this paragraph, the terms of an agreement will be resolved by arbitration under article 54 (arbitration).

Carrying out of the Works

9. Provisions must be made with Transport for London's reasonable requirements at the site of the Works to prevent mud and other materials from being carried on to the adjacent highway by vehicles and plant. The operational highway in the vicinity of the site of the Works is to be swept as required to ensure its safe use as a public highway.
10. The undertaker must not, except with the consent of Transport for London, erect or retain on or over a TfL Road to which the public continues to have access any scaffolding or other structure which obstructs the TfL Road.
11. Except in an emergency or where necessary to secure the safety of the public, no direction or instruction may be given by Transport for London to the contractors, servants or agents of the undertaker regarding any highway operations without the prior consent in writing of the undertaker.
12. In exercising the powers conferred by the Order in relation to any TfL Road the undertaker must have regard to the potential disruption of traffic which may be caused, seek to minimise such disruption so far as is reasonably practicable and must at no time prevent or unreasonably impede access by emergency service vehicles to any property.
13. The undertaker must, if reasonably required by Transport for London, provide and maintain during such time as the undertaker may occupy any part of a TfL Road for the purpose of the construction of any part of the authorised development, temporary ramps for vehicular or pedestrian traffic, or both, and any other traffic measures required to protect the safety of road traffic.

Completion of the Works

14. (1) When the undertaker considers that the Works have reached completion it must notify Transport for London and must allow Transport for London the opportunity to inspect the Works and the undertaker must give proper consideration to any representations that are made by Transport for London.

- (2) The undertaker may not notify Transport for London under sub-paragraph (1) until either
 - (a) a stage 3 safety audit has been carried out in respect of the Works in question in accordance with GG19 of DMRB and in the opinion of the undertaker any recommended works identified in the audit have been completed; or
 - (b) if the Works in question were not subject to a safety audit, Transport for London has been provided an opportunity to inspect the works and the undertaker has in its opinion completed any further works required to address any safety deficiencies or defects identified as a result of the inspection.
- 15. Transport for London must issue to the undertaker a Provisional Certificate in relation to any part of the Works, after completion of that part of the Works if Transport for London is satisfied that the Works have been completed in accordance with this Part of this Schedule.
- 16. No earlier than 52 weeks from the date of issue of the Provisional Certificate, Transport for London must issue a Final Certificate, certifying that all outstanding defects relating to the part of the Works in question and which required remediation have been so remedied, provided that-
 - (a) all identified defects requiring remediation have been so remedied such that Transport for London consider the Final Certificate may be issued;
 - (b) a stage 4 safety audit has been carried out (if a stage 4 safety audit is required in accordance with GG19 of DMRB in connection with the Works), and following proper consideration of the representations of Transport for London, any additional works, alterations or amendments to the Works as a result of the stage 4 safety audit have been completed to the reasonable satisfaction of Transport for London;
 - (c) the undertaker has given Transport for London an opportunity to inspect the Works and has given proper consideration to any representations made by Transport for London;
 - (d) the undertaker has transferred to Transport for London any land and rights pursuant to paragraph 22 under this Part;
 - (e) the undertaker has paid to Transport for London any Commuted Sum due in relation to the part of the TfL Road to which the Provisional Certificate relates;
 - (f) the undertaker has provided Transport for London with such detailed information as Transport for London may reasonably require in relation to the Works as built;
 - (g) the Maintenance Schedule has been approved by Transport for London; and
 - (h) all costs charges, expenses payable to Transport for London pursuant to this Part have been paid.

Defects

- 17. Where the undertaker carries out any Works to any TfL Road it must make good any defects in those Works notified to it by Transport for London within the period of 52 weeks after the date of

the completion of the Works to that area of the TfL Road to the reasonable satisfaction of Transport for London.

18. Where the undertaker carries out any Works to any TfL Road it must make good any latent defects in those Works notified to it by Transport for London within the period of 12 years from the date of the issue of the Provisional Certificate to the reasonable satisfaction of Transport for London.
19. The carrying out of any remedial works required under paragraphs 15 and 16 are to be regarded as works carried out under this Order.
20. The carrying out of any remedial works required under paragraphs 15 and 16 requires the submission of such items of Detailed Information to Transport for London as the undertaker deems to be reasonable in the circumstances but always including a description of the works to be carried out, a schedule of timings for the works, including dates and durations for any closures of any part of a TfL Road and traffic management proposals.
21. (1) The Works pursuant to Paragraphs 17 and 18 of this Schedule must all be completed on such date or dates that will be notified by the undertaker to Transport for London in writing.

(2) Prior to the completion of the Works pursuant to Paragraphs 17 and 18 of this Schedule, and prior to key buried assets being back filled, the undertaker must invite Transport for London to participate in inspection of such works to identify any defects or incomplete works.

Land and Rights

22. The undertaker must, prior to the date on which the A12 Eastbound Off Slip Road becomes a GLA Road under article 16(1)(b), execute and complete a transfer and such other document(s) conferring property rights as may be necessary to Transport for London of any land and rights compulsorily acquired by the undertaker pursuant to articles 25 (compulsory acquisition of land) and 28 (compulsory acquisition of rights and imposition of restrictive covenants) which are necessary for the operation and maintenance of the A12 Eastbound Off Slip Road, at nil consideration.

Indemnity

23. The undertaker will hold Transport for London harmless and indemnified from and against any liability, loss, cost or claim arising out of or incidental to the carrying out of the Works (other than those arising out of or in consequence of any negligent act, default or omission of Transport for London) provided that no claim can be settled or liability accepted by Transport for London without first obtaining the written approval of the undertaker, such approval not to be unreasonably withheld or delayed.

Maintenance Schedule

24. (1) Before commencing the construction of, or the carrying out of any Works the undertaker must provide to Transport for London the Maintenance Schedule.
- (2) The undertaker must not commence construction of, or the carrying out of the Works in question until approval has been given by Transport for London to the Maintenance Schedule.
- (3) If within 28 days after the Maintenance Schedule has been submitted Transport for London has not approved or disapproved it or it has not been otherwise agreed, Transport for London is deemed to have approved it as submitted.
25. Subject to paragraphs 17 to 21 of this Part of this Schedule, Transport for London shall become responsible for the future management and maintenance of those parts of the authorised development described in the Maintenance Schedule on a date agreed between the undertaker and Transport for London following completion of the Works pursuant to this Part of this Schedule.

Costs

26. The undertaker must pay to Transport for London in respect of the highway works a sum equal to the whole of any costs and expenses which Transport for London reasonably incur in -
- (a) participating in the design process under paragraph 6;
 - (b) getting the Highway Assets included within its road maintenance framework contracts;
 - (c) agreeing and operating the Detailed Local Operating Agreement;
 - (d) the examination or approval of the Detailed Information, Other Detailed Information, the Maintenance Schedule and the detailed design, specification and programme of Work No. 29 under this Part;
 - (e) participation in road safety audits required under this Part;
 - (f) inspecting the construction and completion of the Works including any works required by Transport for London under this Part;
 - (g) issuing the Provisional Certificate and Final Certificate required under this Part;
 - (h) carrying out any surveys which are reasonably required in connection with the construction of the Works; and
 - (i) the transfer and grant of land and rights pursuant to paragraph 22 to Transport for London.

Commuted Sum

27. (1) The undertaker must prepare a list of assets not previously forming part of the TfL Roads for which Transport for London will be responsible for maintenance following completion of the Works.
- (2) The undertaker must use reasonable endeavours to agree a schedule of items on the list agreed under sub-paragraph (1) which are Highway Assets having regard to the following:
- (a) standard Highway Assets include -
- (i) carriageways surfaced in concrete asphaltic materials (non-pigmented binder and non-coloured aggregates) or low noise surfacing;
 - (ii) carriageways in shared surface roads, courtyards and housing squares surfaced in 200mm x 100mm x 80mm rectangular concrete block paving (optional);
 - (iii) footway surfaced in concrete asphaltic materials (non-pigmented binder or coloured aggregates);
 - (iv) footways adjacent to block paved carriageways also surfaced in 200mm x 100mm x 65mm thick concrete block paving (optional);
 - (v) cycleways surfaced in concrete asphaltic materials (red pigmented binders and/or aggregates);
 - (vi) pre-cast concrete kerbing;
 - (vii) gully drainage, ditches, connection pipes and gravity draining highway carrier drains;
 - (viii) galvanised pedestrian guard railing;
 - (ix) standard highway lighting layouts, columns and lanterns;
 - (x) standard illuminated and non-illuminated highway signs;
 - (xi) passively safe signposts where required for road safety;
 - (xii) bollards and markers posts manufactured from plastic derivatives or recycled plastic/rubber;
 - (xiii) road markings;
 - (xiv) grass verges;
- (b) non-standard Highway Assets include -
- (i) any culvert, bridge, retaining wall or other structure;
-

- (ii) special fencing features such as noise fencing, knee rails and fences, gates;
- (iii) barriers such as vehicle restraint barriers, pedestrian guard railing;
- (iv) landscaping features such as planting, trees, hedging;
- (v) sustainable drainage systems or non-standard highway drainage features such as -
 - (aa) attenuation pond;
 - (bb) flow control devices and attenuation storage;
 - (cc) SuSDS including maintenance of any landscaping;
 - (dd) oil or petrol interceptors including the disposal of contaminated waste;
 - (ee) pumping stations and their energy charges;
 - (ff) watercourses and swales.

(3) Where the schedule prepared under paragraph (2) cannot be agreed, the determination of the schedule will be referred to arbitration under article 54 (arbitration).

(4) Following agreement of the schedule under sub-paragraph (2) or determination under sub-paragraph (3), Transport for London must prepare a calculation of the Commuted Sum based on the maintenance Transport for London considers to be required for the schedule of Highway Assets agreed under sub-paragraph (2) or determined under sub-paragraph (3) and must use reasonable endeavours to agree it with the undertaker.

(5) The undertaker must be provided with a complete breakdown of the calculation of the Commuted Sum by Transport for London under sub-paragraph (4) including any assumptions used.

(6) Where the calculation prepared under sub-paragraph (4) cannot be agreed, the determination of the Commuted Sum will be referred to arbitration under article 54 (arbitration).

(7) The undertaker must pay the Commuted Sum to Transport for London in one instalment within 10 working days of the later of -

- (a) the date of completion of the authorised development; or
- (b) the date of agreement of the value of the Commuted Sum under sub-paragraph (4) or determination under sub-paragraph (6).

Work No. 29

28. (1) The undertaker must not commence construction of, or the carrying out of Work No. 29 until approval has been given by Transport for London to the detailed design, specification and programme for such work.
- (2) Work No. 29 must not be constructed except in accordance with the details as approved in accordance with sub-paragraph (1).
- (3) The undertaker must not transfer the benefit of the Order pursuant to article 9 (consent to transfer benefit of the Order) to enable Cadent Gas (or a related subsidiary company) unless evidence has been provided to Transport for London's reasonable satisfaction that Cadent Gas (or a related subsidiary company) is obliged to carry out Work No. 29 only in accordance with the details as approved in accordance with sub-paragraph (1).

Step In

29. Nothing in this Part of this Schedule prevents Transport for London from carrying out any work or taking such action as deemed appropriate forthwith without prior notice to the undertaker in the event of an emergency or danger to the public.

Disputes

30. Any difference arising between the undertaker and Transport for London under this Part of this Schedule (other than in difference as to the meaning or construction of this Part of this Schedule) will be resolved by arbitration under article 54 (arbitration).