CITY AIRPORT DEVELOPMENT PROGRAMME (CADP1) S73 APPLICATION

ENVIRONMENTAL STATEMENT

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City Airport Development Programme (CADP1) S73 Application

Volume 1: Environmental Statement Chapter 15: Summary of Mitigation and Residual Effects

December 2022

15 Summary of Mitigation and Residual Effects

15.1.1 This chapter summarises the residual (remaining) environmental effects of the proposed development following implementation of the recommended additional mitigation measures as outlined in the technical chapters of this ES (Chapters 7 - 12).

15.1.2 The ES presents the "likely significant environmental effects" of the proposed development as required by the EIA Regulations 2011, using established assessment methodologies, standards and guidelines.

15.1.3 The development of mitigation measures to avoid, reduce or offset predicted significant adverse effects and, equally, to enhance the potential beneficial effects of the proposed development has been considered throughout the EIA process which commence in early 2022. The final proposed mitigation measures are summarised in this chapter.

15.1.4 It should be noted that the initial assessment of effects in each Chapter of this ES assumes the implementation of embedded mitigation measures, as set out in Chapter 3: EIA Methodology. These include those that are secured through design, existing and approved planning conditions attached to the CADP1 planning permission, and agreements and commitments made in the existing Section 106 Agreement. The embedded mitigation measures assumed to be in place and carried forward to any future consent are clearly set out in each technical chapter and are not repeated in this chapter.

15.1.5 Residual effects have been determined based on the assumption that the recommended additional mitigation measures outlined in Chapters 7 to 12 are implemented. A composite summary of the recommended mitigation and the main residual effects of the proposed development is presented in Table 15.1 below.

15.1.6 For those additional 'scoped-out' environmental topics discussed in Chapter 13 of the ES, no new significant effects are considered likely as a result of the proposed development and no additional mitigation is required in addition to that already secured under the existing CADP1 consent. Accordingly, these environmental topics are not discussed further in this chapter.

Table 15-1 Summary of Mitigation and Residual Effects

| ES Chapter | Summary of Impacts | Proposed Mitigation | Residual Effects |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chapter 7: Socio- Economics | Direct employment and GVA effects associated with construction. | Ongoing monitoring through LCY's Annual Performance Report of: | Negligible at the Local and Regional Level (Not Significant) |
| | Direct, indirect and induced employment and associated GVA impacts associated with implementation and operation of the proposed development. | Onsite employment and diversity (including by sex and age); Supply chain opportunities; and Community engagement opportunities. | 2025: Minor Beneficial at the Local and Regional Level (Not Significant) |
| | | | 2027: Minor Beneficial at the Local and Regional Level (Not Significant) |
| | | | 2031: Moderate Beneficial at the Local and Regional Level (Significant) |
| | Beneficial effects on the local jobs market in terms of employment opportunities for different skills levels. | | 2025: Minor Beneficial at the Borough and Local Level and Negligible/Minor Beneficial at the Regional Level (Not Significant) |
| | | | 2027: Minor Beneficial at the Borough and Local Level and Negligible/Minor Beneficial at the Regional Level (Not Significant) |
| | | | 2031: Major Beneficial at the Borough Level and Moderate Beneficial at the Local and Regional Level (Significant) |
| | Wider socio-economic beneficial effects on the London economy in terms the catalytic impacts on inward investment and location decisions (which are reflected in increased business productivity) and inbound tourism spend (business and leisure) in the local area. | | 2025: Negligible at the Local and Regional Level (Not Significant) |
| | | | 2027: Minor Beneficial at the Local Level (Not Significant) and Moderate Beneficial at the Regional Level (Significant) |
| | | | 2031: Minor Beneficial at the Local Level (Not Significant) and Moderate Beneficial at the Regional Level (Significant) |
| Chapter 8: Noise | Impacts from construction noise associated with construction of the remaining elements of CADP1. | No additional mitigation is required. Nevertheless, LCY are proposing to enhance the sound insulation scheme as part of the proposed development. This will be secured through the S106 Agreement. | Negligible (Not Significant) during daytime operational hours. Negligible to Minor Adverse (Not Significant) during Out of Operational Hours periods. |
| | Impacts from air noise associated in increases in forecast daytime, night-time and weekend aircraft movements and the greater use of quieter new generation aircraft. | | 2025: Negligible (Not Significant) for daytime and weekend noise. Negligible to Minor Adverse (Not Significant) for night-time noise. |
| | | | 2027: Negligible to Minor Beneficial (Not Significant) for daytime noise. Negligible (Not Significant) for weekend noise. Minor Beneficial to Minor Adverse (Not Significant) for night-time noise. |
| | | | 2031: Negligible (Not Significant) for daytime noise. Negligible (Not Significant) for weekend noise. Minor Beneficial to Minor Adverse (Not Significant) for night-time noise. |

| ES Chapter | Summary of Impacts | Proposed Mitigation | Residual Effects |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Impacts from ground noise | | 2025: Negligible (Not Significant) for daytime, night-time and weekend noise. |
| | | | 2027: Negligible (Not Significant) for daytime noise. Negligible to Minor Adverse (Not Significant) for weekend and night-time noise. |
| | | | 2031: Negligible (Not Significant) for daytime noise. Negligible to Minor Adverse (Not Significant) for weekend and night-time noise. |
| | Impacts from road traffic noise | | 2025: Negligible (Not Significant) for daytime and weekend noise. |
| | | | 2027: Negligible (Not Significant) for daytime and weekend noise. |
| | | | 2031: Negligible (Not Significant) for daytime and weekend noise. |
| Chapter 9 – Air Quality | Impacts from emissions associated with the proposed development and exposure of receptors to poor air quality. | No additional mitigation required. | Negligible (Not Significant) for all assessment years |
| | Increases in odour. Modelled odour concentrations remain below the threshold at which moderately offensive odours may become unacceptable. | No additional mitigation required. | Negligible (Not Significant) for all assessment years |
| Chapter 10 - | Impacts on the highway network from increases in daily | Condition 71 of the CADP1 consent requires compliance with an Airport Travel Plan, while the S106 Agreement ensures it is kept up to date in consultation with the Airport Transport Forum. The Travel Plan will be updated as necessary to help deliver mode share targets (80% sustainable mode share for passengers by 2030). | Slight Adverse to Moderate Negative (Not Significant) in 2031. |
| Surface Access | vehicle flows on local road. Of the 29 highway links assessed, four are predicted to experience increases of greater than 10%: Link 7: Hartmann Road, East of Connaught Road – Western Airport Access; | | Not Significant in all other assessment years. |
| | Link 8: Hartmann Road, West of Albert Road, Committed Eastern Airport Access; Link 9: Connaught Road, East of Roundabout; and Link 10: Connaught Road, West of Roundabout. | | |
| | Impacts on severance associated with localised traffic flow increases. | | Slight Adverse to Moderate Negative (Not Significant) in 2031. |
| | | - | Not Significant in all other assessment years. |
| | Impacts on driver delay associated with localised traffic flow increases. | | Neutral to Slight Negative (Not Significant) in 2031. Not Significant in all other assessment years. |
| | Impacts on pedestrian and cyclist associated with localised traffic flow increases. | | not olymnoart in an other assessment years. |

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| | Impacts on pedestrian amenity associated with localised traffic flow increases. | _ | |
| | Impacts on pedestrian fear and intimidation associated with localised traffic flow increases. | _ | |
| | Increased demand on the public transport network (Rail; DLR; Bus and Riverboat) from passenger flow increases. | | Neutral to Slight Negative (Not Significant) in 2031. Not Significant in all other assessment years. |
| Chapter 11 (A): Greenhouse Gas Assessment | Contribution of emissions from aircraft as a percentage of the 4 th and 5 th carbon budget planning assumptions and 6 th carbon budget and the impact of aircraft emissions on the ability of the Government to achieve its carbon reduction targets. | No additional mitigation required | Minor Adverse (Not Significant) |
| | Contribution of emissions from the airport during both construction and operation as a percentage of the 4 th , 5 th and 6 th carbon budgets and the impact of emissions on the ability to achieve existing and emerging policy requirements in respect of decarbonisation. | | Minor Adverse (Not Significant) |
| Chapter 11 (B): Climate Change | Impacts on travel disruption, loss of business through aircraft grounding and water damage associated with flooding and sea level rise. | No additional mitigation required | Not Significant |
| Resilience | Impacts on water supply and damage from drying and shrinking of underlying soils. | No additional mitigation required | Not Significant |
| | Impacts from fire and heat stress associated with heatwaves. | No additional mitigation required | Not Significant |
| | Impacts on travel disruption, loss of business through aircraft grounding, wind damage, loss of power and unsafe working conditions associated with increased winds and storms. | No additional mitigation required | Not Significant |
| | Impacts on travel disruption, loss of business through aircraft grounding, injuries and infrastructure damage associated with snow and ice. | No additional mitigation required | Not Significant |
| Chapter 12 – Public Health & Well Being | Noise impacts on the health and wellbeing of the general population and vulnerable population groups. | Targeted support to promote uptake of the sound insulation scheme amongst vulnerable groups such as those where English is not a first language and for those with low literacy. | Minor Adverse (Not Significant) in 2031. Not Significant in all other assessment years. |

| S Chapter | Summary of Impacts | Proposed Mitigation | Residual Effects |
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| | Impacts from disturbance at public open spaces on healthy lifestyles (physical activity and leisure), on the general population and vulnerable population groups. | It is recommended that part of the Community Investment Fund is used to provide new or improved inclusive open space and sports facilities in accordance with LBN Local Plan Policy SP2. | Minor Adverse (Not Significant) in 2031. Not Significant in all other assessment years. |
| | Impacts on the safety and cohesiveness of communities associated with changes to community identity. | No additional mitigation required. | Minor Adverse and Minor Beneficial (Not Significant) in 2031. Not Significant in all other assessment years. |
| | Impacts on the safety and cohesiveness of communities associated with surface access and transport. | No additional mitigation required. | Minor Adverse and Minor Beneficial (Not Significant) in 2031. Not Significant in all other assessment years. |
| | Impact of good quality employment opportunities on the health and wellbeing of the general population and vulnerable population groups. | Ongoing monitoring of onsite employment and diversity (including proportion of local people with long- term unemployment, high job instability or low-income characteristics) through LCY's Annual Performance Report. | Moderate Beneficial (Significant) in 2031. Not Significant in all other assessment years. |
| | Impacts of training opportunities associated with the proposed development on the health and wellbeing of the general population and vulnerable population groups. | Monitoring of training opportunity take up and completion by young people not in education, employment or training (NEET) to confirm requirement for further targeting. | Moderate Beneficial (Significant) in 2031. Not Significant in all other assessment years. |
| | Air Quality impacts on the health and wellbeing of the general population and vulnerable population groups. | No additional mitigation required. | Minor Adverse (Not Significant) in 2031. Not Significant in all other assessment years. |
| | Impacts from Ultra Fine Particle emissions on the health and wellbeing of the general population and vulnerable population groups. | No additional mitigation is required. Nevertheless, the airport will undertake appropriate future monitoring of UFPs in consultation with LBN. | Minor Adverse (Not Significant) in 2031. Not Significant in all other assessment years. |
| | Impacts from Climate Change on the health and wellbeing of the general population and vulnerable population groups. | No additional mitigation required. | Minor Adverse (Not Significant) in 2031. Not Significant in all other assessment years. |
| | Impacts on NHS healthcare service planning. | Collect and share data relevant to healthcare usage associated with the airport. | Minor Adverse (Not Significant) in 2031. Not Significant in all other assessment years. |

| ES Chapter | Summary of Impacts | Proposed Mitigation | Residual Effects |
|------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| | | Continue to operate a high-quality occupational health service for staff at the airport. | |
| | | Promote measures and information at the airport for the protection and improvement of health for passengers, visitors and staff. | |

Conclusions

15.1.7 The potential environmental effects proposed development, comprising the extant elements of the approved CADP1 scheme together with the proposed amendments, has been rigorously assessed through an EIA process spanning approximately 10 months. The ES concludes that the adverse environmental effects of the proposed development will generally range in significance from negligible to minor adverse (i.e., not significant), and that there will be some significant beneficial effects to the local, regional and wider economy. No significant adverse effects have been identified which could not be adequately mitigated through appropriate environmental controls, including those already in place at the airport and embedded through the discharge of the CADP1 planning conditions and S106 Agreement.

15.1.8 Due to the relatively modest scale, duration and programme for the remaining CADP1 construction works, the residual effects at this stage are all determined to be negligible to minor adverse (at worst). Specific construction effects will be managed through the implementation of the previously approved CEMP and other mitigation measures described in ES Chapter 6, and within the subsequent technical topic ES Chapters 7-12.

15.1.9 Operational environmental effects of the proposed development have been assessed for an extended timeline from the 2019 Baseline Year through to the 2031 Principal Assessment Year. However, in accordance with convention and best practice standards, the EIA has focused on assessing the difference in environmental effects between the Do Minimum (DM) Scenario without the proposed amendments and the Development Case (DC) with the proposed amendments in 2031. This is the point at which the maximum passenger throughput (9.0 mppa) and maximum number of aircraft movements (111,000) would be achieved and therefore generally represents the greatest difference in environmental effects between DM and DC scenarios. However, additionally and where relevant, the differences in environmental effects between the DM and DC outcomes also been determined for specific 'worst case' years (e.g. 2025 for air noise) and for 2027; this being the Transitional Year during which a noticeable divergence will occur between the 'status quo' of retaining the 6.5 mppa limit and existing Saturday hours and the additional growth in passenger numbers stimulated by proposed amendments and consequential effects this will have in incentivising airlines to upgrade their fleets with quieter new generation aircraft.

15.1.10 In all assessment cases, including the various sensitivity tests applied, no significant (i.e., moderate or major) adverse environmental effects have been identified. Moreover, those minor adverse effects that have been identified are capable of being further mitigated to a 'negligible' level, as set out in the table above.

15.1.11 18.21 Overall, the impacts and residual effects identified within the ES are typically negligible in nature, once the proposed mitigation measures have been incorporated. Significantly beneficial residual effects have been identified in relation to socio-economic impacts of the proposed development, due to the positive influence it will have in facilitating additional investment, employment and tourism, as well as providing benefits to the end users of the airport such as new route options and destinations.

15.1.12 As set out in this ES and the Planning Statement submitted with the S73 application, the proposed development is directly in accordance with national policy for airports to 'make best use' of existing and approved infrastructure and is compatible with Government's objectives to achieve its carbon reduction targets towards the goal on Net Zero.