

10 SUMMARY OF MITIGATION AND RESIDUAL EFFECTS

10.1 Introduction

- 10.1 This Chapter summarises the residual effects of the proposed scheme in 2010 measured against the 2006 Baseline 'Current Situation' and the 2010 (Without Consent) assessment scenario. Residual effects have been determined based on the assumption that the proposed mitigation outlined in Chapters 5 to 9 has been implemented. These mitigation and enhancement measures are summarised within this chapter.
- 10.2 As the proposed scheme does not include any built works, there is no requirement for the applicant to invite an appropriate condition to require the submission of a Construction Environmental Management Plan (CEMP), or similar, to LBN for approval.
- 10.3 A wide range of mitigation measures and environmental controls are already in place at LCY, which have been implemented to avoid or minimise environmental effects from the ongoing operation of the Airport. These environmental controls have proven to be highly effective, as evidenced by the consistently low number of complaints received. It is therefore proposed to retain and where appropriate enhance these controls to accommodate the proposed increase in aircraft and passenger numbers. In addition, this assessment has identified opportunities for further environmental enhancements where such measures are within the demise of the Airport and aligned to the Scheme aspirations.

10.2 Mitigation

- 10.2.1 Table 10.1 below presents a summary of the mitigation measures arising out of the assessment and the further enhancement features proposed to be incorporated into the Scheme.

Table 10.1: Existing and Proposed Mitigation and Enhancement Features

ES Chapter	Proposed Mitigation and Enhancement Measures	Objective
<p>Chapter 5: Surface Transport and Access</p>	<p>The additional trips resulting from the proposed scheme will not change the performance of the current surface access networks. As such, no direct mitigation is necessary.</p> <p>Despite this, LCY will continue to monitor passenger numbers and investigate any occurrences where capacity is exceeded, particularly during peak event times (e.g. ExCeL events).</p>	<p>To improve access to the Airport and ensure that additional throughput does not negatively impact on surface transport modes.</p>
	<p>LCY to manage, implement, monitor and review a Travel Plan aimed at reducing car dependency of passengers and staff accessing the Airport.</p> <p>The Travel Plan is to be made available to residents, businesses and staff and will identify a range of initiatives, measures and marketing strategies, covering walking and cycling, public transport, car sharing and parking.</p>	<p>To encourage travel by means other than car, and to provide safe and convenient access for staff, visitors and residents at all times.</p>
<p>Chapter 6: Air Noise</p>	<p>Maintain existing operational controls to limit noise nuisance, including:</p> <ul style="list-style-type: none"> ▪ The noise and flight track system to monitor operational behaviour of aircraft and airlines and ensure that the air noise climate is controlled to an acceptable level; ▪ Aircraft categorisation arrangements whereby aircraft operating at LCY are grouped according to their departure noise levels; ▪ The public noise complaint handling service; and ▪ Maintaining preferred noise routes and an approach glide slope of 5.5 degrees for all aircraft. 	<p>To monitor and control noise levels and minimise the potential exposure of residents to noise effects which are greater than those currently experienced.</p>
	<p>More rigorous application of the Noise Management Scheme agreed with LBN which provides the Airport with the ability to reward and penalise airlines for quiet and noisy operations respectively.</p>	<p>As above.</p>
	<p>Maintaining restrictions on flights outside daytime period and for uninterrupted 24 hour period at weekends.</p>	<p>To avoid disturbance of sleep of residents within flight paths.</p>

ES Chapter	Proposed Mitigation and Enhancement Measures	Objective
	<p>Maintaining, and where appropriate enhancing, the Sound Insulation Grant Scheme using the existing eligibility criterion.</p> <p>Sound insulation treatment is to provide a reduction of not less than 25dB (100-3510Hz average) if adequate levels of sound insulation are not already in place.</p>	To minimise noise nuisance to residents and local schools located within close proximity of the Airport.
Chapter 6: Ground Noise	Preference for fixed electrical ground power units and limited use of APUs to no more than 10 minutes prior to departure and 10 minutes after landing.	To reduce the frequency and duration of the operation of APUs at LCY.
	Provision of a noise barrier adjacent to the new parking apron over King George V Dock which is under construction.	To provide protection from ground noise to those receiver positions which are positioned close to the Airport apron.
Chapter 6: Road Traffic Noise	<p>Increases in road traffic noise are predicted to be negligible.</p> <p>For dwellings that fall within the 57 dB noise contour LCY will continue to provide its Sound Insulation Grant Scheme to minimise the effects of air noise. Where such dwellings are also located close to local roads surrounding LCY, it is expected that insulation will also mitigate the impacts of road traffic noise.</p>	To minimise road traffic noise effects on local residents.
Chapter 7: Air Quality	Maintain comprehensive air quality monitoring regime (continuous monitor on roof of City Aviation House and series of diffusion tubes around the airport and surrounding areas) including the provision of quarterly reports to LBN.	Continuous monitoring of air quality impacts in the area of LCY to inform decision making and ensure appropriate actions are taken if required.
	Maintain facilities for fixed ground electrical power.	Avoiding the use of power sources such as MGPU's and APUs that contribute to local pollutant emissions.
	LCY to continue to work closely with the air traffic controllers (NATS) to minimise idle and taxi times prior to take-off.	To reduce emissions from aircraft taxiing and reduce contribution to pollution concentrations.
	Implementation of a Travel Plan to encourage travel public transport and reduce car dependency.	Reduce emissions from private motor vehicles accessing LCY.
	Continued renewal of ageing Airport vehicles with new, low-emission alternatives including electric vehicles.	Minimise the effect of land and airside operations upon local air quality.
Chapter 8: Socio-economic	The proposed scheme will have significant beneficial socio-economic effects, and LCY will continue to act to promote and invest in existing community and employment initiatives.	LCY to continue to promote training, education, and job opportunities whilst enhancing community welfare.

ES Chapter	Proposed Mitigation and Enhancement Measures	Objective
Chapter 9: Waste	Introduce all employees on site at LCY to paper and cardboard recycling before the end of 2007	Recycling 10% of LCY's waste by the end of 2007 and increase recycling by a further 10% by the end of 2008.
	Provision of adequate waste segregation facilities in the terminal building, offices and elsewhere on the Airport site.	
	Specific training and awareness campaigns will also be implemented.	

10.3 Residual Effects

10.3.1 Each of the technical chapters (chapters 5 to 9) in the ES has set out the details of the residual effects of the development, assuming implementation of existing and proposed mitigation. It is appropriate however to set out the composite position on the main residual effects of the development, to provide a synopsis for the LBN. Table 10.2 below provides that summary and adopts the significance criteria as set out in Chapter 2: Scoping and EIA Methodology.

Table 10.2: Residual Effects

ES Chapter	Description of Effect	Significance of Effect with mitigation in place (Beneficial or Adverse):
Chapter 5: Surface Transport and Access	There will be small increase of traffic on local roads as a result of the proposed scheme.	The residual impact of additional traffic on local roads is considered to be minor (adverse). The assessment has demonstrated that the existing capacity of the local road network is adequate to accommodate the additional traffic that will be generated as a result of the Proposed Scheme.
	The proposed scheme will result in increased demands on public transport infrastructure and facilities.	The residual impact of increased demands for public transport is considered to be negligible . The projected increase in passengers travelling by bus is minimal and likely to be within fluctuations that will occur in any event. The magnitude of capacity taken on the DLR as a result of the proposals is small and will reduce further given proposals to increase capacity on this part of the network.
Chapter 6: Air Noise	A greater number of residential dwellings will fall within the 57 dB A noise contour, which is predicted to expand in area by 50% as a result of the proposed scheme. As such, the majority of residential dwellings within the predicted noise contours will fall within PPG24 Noise Exposure Category B, although some areas may fall within Noise Exposure Category C	The overall significance of the effects is considered to be negligible in the context of LCY's operations and the benefits of the Proposed Scheme. However, a small proportion of residents will experience some degree of noise nuisance when they have not been previously subject to any noise nuisance. Equally, some residents will experience noise nuisance above levels which they are currently exposed to. This impact can

ES Chapter	Description of Effect	Significance of Effect with mitigation in place (Beneficial or Adverse):
	Furthermore, a greater number of residential dwellings will be subjected to an increase in noise levels ranging between 1 and just under 3 dB A.	be considered to be minor (adverse). In all cases, sound insulation treatment will be provided by LCY under the Sound Insulation Grant Scheme to provide a reduction of not less than 25dB (100-3510Hz average) to properties if adequate levels of sound insulation are not already in place.
Chapter 6: Ground Noise	With mitigation, it is predicted that the Proposed Scheme is unlikely to expose any residences surrounding LCY to ground noise over and above existing levels.	The significance of the effects is considered to be negligible as it is unlikely any residences will be exposed to ground noise significantly above existing levels.
Chapter 6: Road Traffic Noise	With mitigation, increases in road traffic noise are predicted to be negligible.	The significance of the effects is considered to be negligible as it is unlikely any residences/ road users will be exposed to ground noise significantly above existing levels.
Chapter 7: Air Quality	With mitigation, air quality impacts are predicted to be very small. Increases in NOx levels on some local roads surrounding LCY resulting from increased surface traffic, range from 1-2.5% with the proposed scheme.	Overall, the significance of the effects is considered to be negligible and even in the worst affected locations, air quality will remain below the Air Quality Strategy objectives.
Chapter 8: Socio-economic	Beneficial socio-economic effects including opportunities for job creation, training and education and enhancing community welfare as well as significant wider economic benefits.	The proposed scheme will have a substantial (beneficial) effect.
Chapter 9: Waste	With mitigation, the amount of waste produced by LCY is predicted to increase by approximately 274 tonnes.	Overall this is considered to be a minor (adverse) effect, given LCY's commitment to recycling and other waste minimisation initiatives.

10.4 Summary

10.4.1 This Chapter has identified the existing and proposed mitigation and enhancement measures LCY proposes to address the environmental effects resulting from the Proposed Scheme. The likely residual effects and the significance of such effects have also been determined.

10.4.2 Overall, the Proposed Scheme has been demonstrated to have generally negligible or minor adverse environmental effects. This should be considered relative to the substantial beneficial effect the Proposed Scheme will have in the local and wider economy of Newham, Docklands, the City and elsewhere.