



Planning Specialist Observations			
Specialism(s)	Air Quality		
Officer	Wai Hing Tse		
Site	THE LODGE HARMONDSWORTH LANE HARMONDSWORTH		
Proposal	Change of use of the building from office (Use Class E) to non-residential education centre (SEND school) (Use Class F1) with minor external alterations including, gates, fences, and cycle stores, and associated landscaping works.		
Planning Ref	2157/APP/2025/2060	Date	24/06/2026

Objection	Condition	Informative	No Comments	Discharge of Condition
	X			

1 Summary of Comments

The proposed development is located within the LBH Air Quality Management Area and surrounded by three Focus Areas, namely M4 Corridor Area to the North (420m), Sipson Focus Area to the East (1033m) and A4 Corridor Focus Area to the South (550m), bringing additional traffic emissions which will contribute to detriment of local air quality.

As per the London Plan, developments need to be air quality neutral as minimum and LBH requires development proposals located in Focus Areas (or that are likely to affect such sensitive areas) to apply a more stringent air quality neutral approach and be air quality positive (LBH Air Quality Local Action Plan 2019-2024), contributing to the reduction of emissions in these sensitive areas.

According to LBH Local Action Plan, proposed development with impacts within Focus Areas (or with impacts on FAs) require more stringent air quality neutral procedures and needs to be Air Quality positive, with a total emission mitigation approach.

LBH requires developments to incorporate air quality positive design measures from the outset and suitable mitigation measures to reduce pollution, especially with impacts in areas where the air quality is already poor (LBH Air Quality Local Action Plan 2019-2024), namely Focus Areas. Furthermore, policy DMEI 14 of the emerging London Borough of Hillingdon Local Plan (part 2), requires active contribution towards the continued improvement of air quality, especially if there are any impacts foreseen within the Air Quality Management Area.



According to LBH, proposed development within Focus Areas (or with impacts on FAs) needs to be Air Quality neutral and positive and further action is required to reduce total emissions produced by its operation.

Therefore, the total emissions associated with these activities need to be mitigated.

In the absence of data in the Transport Assessment submitted to support the planning application, an indicative estimate of daily vehicle movements associated with the proposed Special Educational Needs and Disabilities (SEND) school development.

The Transport Assessment submitted in support of the planning application does not provide a quantified trip generation assessment for the proposed school operation. Consequently, an independent estimate has been prepared using the operational information provided by the applicant, together with reasonable assumptions derived from the characteristics of SEND school travel patterns.

The purpose of this assessment is to establish an indicative level of vehicle activity that may be expected to occur on a typical school day.

Pupil Numbers Considered

The applicant's proposals comprise:

- ✓ Aviation House – 40 pupils
- ✓ Lodge Building – 24 pupils
- ✓ Annex Building – 64 pupils

However, the 40 pupils accommodated within Aviation House have already been approved under a separate planning permission and therefore should not be included when assessing the additional transport impacts arising from the current application.

Accordingly, the assessment considers only the additional pupil provision associated with the Lodge and Annex buildings:

24 pupils + 64 pupils = 88 pupils

Staff Numbers

The supporting documentation indicates that staffing levels will be provided at a ratio of approximately 0.75 staff members per pupil.

Applying this ratio to the additional 88 pupils gives:

$88 \text{ pupils} \times 0.75 = 66 \text{ staff}$

The assessment therefore assumes approximately 66 staff associated with the additional development.



Staff Private Vehicle Movements

The operator's supporting information indicates that approximately 27% of staff are expected to travel by private car.

Applying this proportion to 66 staff results in: $66 \times 27\% = 18$ staff arriving by private car.

Each staff vehicle would normally generate one inbound movement at the start of the school day and one outbound movement at the end of the day.

Accordingly:

$18 \text{ vehicles} \times 2 \text{ movements} = 36 \text{ daily two-way vehicle movements}$

Parent/Carer Vehicle Movements

The applicant has indicated that approximately 10% of pupils are expected to be transported directly by parents or carers.

Applying this proportion to 88 pupils results in:

$88 \times 10\% = 9$ pupils

For school travel purposes, a parent vehicle normally generates:

- ✓ Arrival at the school for drop-off;
- ✓ Departure following drop-off;
- ✓ Arrival for afternoon collection;
- ✓ Departure following collection.

This equates to four vehicle movements per pupil per day.

Accordingly:

$9 \text{ pupils} \times 4 \text{ movements} = 36 \text{ daily two-way vehicle movements}$

SEND Taxi and Private Hire Vehicle Movements

The majority of pupils attending SEND schools are typically transported under local authority-arranged transport schemes using taxis, private hire vehicles or accessible transport services. For a conservative assessment, it has been assumed that approximately 45–50 pupils would arrive via taxi or private hire vehicle.

As with parent transport, each vehicle undertaking a morning drop-off and afternoon collection generates four daily movements:

- ✓ Arrival for morning drop-off;
- ✓ Departure following drop-off;
- ✓ Arrival for afternoon collection;
- ✓ Departure following collection.

This results in:

$45 \text{ pupils} \times 4 = 180 \text{ daily movements}$

to

$50 \text{ pupils} \times 4 = 200 \text{ daily movements}$



Accordingly, SEND taxis and private hire vehicles are estimated to generate approximately 180–200 daily two-way movements.

Minibus Movements

The remaining pupils are assumed to arrive via shared transport arrangements, including accessible minibuses commissioned by local authorities or specialist transport providers.

Assuming approximately 30–35 pupils travel by minibus, and assuming average occupancies of around six pupils per vehicle, this equates to approximately 5–6 minibuses serving the site.

Each minibus undertaking one morning arrival/departure cycle and one afternoon arrival/departure cycle generates four movements per day.

Accordingly:

5 minibuses × 4 movements = 20 daily movements

to

6 minibuses × 4 movements = 24 daily movements

The assessment therefore estimates approximately 20–24 daily minibus movements.

Summary of Vehicle Generation

The estimated vehicle movements associated with the additional 88-pupil development are summarised on Table 1.

Table 1 - Summary of Vehicle Generation

Trip Source	Daily Two-Way Movements
Staff private cars	36
Parent/private cars	36
SEND taxis/private hire	180–200
Car/taxi subtotal	252–272
Minibuses	20–24
Total	Approximately 272–294

For planning assessment purposes, a conservative estimate of approximately 270 daily two-way car/taxi movements; and approximately 24 daily two-way minibus movements is considered appropriate. This results in an overall operational vehicle generation of approximately: 294 daily two-way vehicle movements associated with the additional 88-place SEND school provision.

The ranges expected are presented in Table 2:



Table 2 - Scenario range for the additional 88 SEND pupils

Scenario	Assumption	Daily two-way movements
Low	More shared minibus transport, fewer taxis	190–220
Mid-point	Mixed taxis/private hire and minibuses	240–260
Conservative upper case	High taxi/private hire use, limited minibus sharing	c. 294
Worst case	No minibuses; all non-parent pupils by taxi/private hire	c. 388–390

The likely daily vehicle generation is expected to fall within a range of approximately 190–294 two-way vehicle movements per day, depending on the degree of shared transport. A reasonable mid-point estimate is approximately 250 daily two-way movements. A conservative upper-case estimate is 294 daily two-way movements. If no minibus/shared transport is provided, the worst-case daily generation could rise to approximately 390 two-way vehicle movements per day.

The midpoint of 250 vehicle movements was used in the damage cost calculations undertaken.

DAMAGE COST AND MITIGATION MEASURES

Mitigation measures to reduce emissions can be applied on-site or off-site. Where this is not practical or desirable, pollutant off-setting will be applied. The level of mitigation required associated with the operation phase of the proposed development is calculated using GLA's Air Quality neutral Approach.

The mitigation measures proposed were evaluated in terms of likely emission reductions onto local air quality. Wherever quantifiable, these are calculated and subtracted from the overall value due. When no quantification is possible, a flat rate discount is applied. Table 3 and 4 summarise the aspects of air quality and planning requirements for the proposed development.



Table 3 – Air Quality Neutral

Development	Units/area	Trip generation	AQ Neutral	Within FA/catchment area of FA?	Air Quality Positive?
SEND school (Use Class F1)	2,105 m ²		no	yes	no
Requirements		Mitigation of total NOx /PM _{2.5}	none	yes	S106 required £135,001

Table 4 – Level of Mitigation required, and reductions applied

Reductions Applied	Total	
	%	Damage Cost
Total Level of Mitigation Required	-	£135,001
Travel Plan	10	£13,500
Green Measures	0	
LBH Strategic Long-term projects	0	
Total reduction	10	
Total Damage Cost/S106 due	90	£121,500

The level of mitigation required from the proposed development for traffic emissions is £135,001. Once all deductions were applied, the remaining value of mitigation due is £121,500. Flat rate deductions applied are as follow: Travel Plan (10%), Green Sustainable Measures (0%), contribution to long term LBH strategic long-term strategies (e.g. multimodal shift) (0%), totalling a reduction of £13,500.

Therefore, a section 106 agreement with the LAP of **£121,500** is to be paid for Hillingdon to deliver its air quality local action plan and or implement specific measures on/along the road network affected by the proposal that reduce vehicle emissions and or reduce human exposure to pollution levels, in association with the residential part of the development.

Mitigation of traffic emissions associated with construction and the commercial floorspace have not been accounted for and shall be part of the reserved matters for the detailed stage.

2 Reason for Refusal (if objecting)

N/A

3 Observations



Air Quality conditions are required to manage operation and construction emissions as required by the Mayor of London. See text below.

IMPORTANT NOTICE

1st January 2025 sees stricter requirements on emissions from mobile machinery in London, requiring EURO IV standards to be complied with. Please refer the applicant to the site below for compliance

<https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/pollution-and-air-quality/nrmm>

Conditions - Reducing Emissions from Demolition and Construction

A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).

Reason: Compliance with London Plan Policy SI 1 and in accordance with Mayor of London "The Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)

B All Non-Road Mobile Machinery (NRMM) of net power of 37kW and up to and including 560kW used during the course of the demolition, site preparation and construction phases shall comply with the emission standards set out in chapter 7 of the GLA's supplementary planning guidance "Control of Dust and Emissions During Construction and Demolition" dated July 2014 (SPG), or subsequent guidance. Unless it complies with the standards set out in the SPG, no NRMM shall be on site, at any time, whether in use or not, without the prior written consent of the local planning authority. The developer shall keep an up-to-date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register at <https://nrmm.london/>."

Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy

Context

The proposed development affects an identified Air Quality Focus Area. Air Quality Focus Areas are defined by the GLA as areas already suffering from poor air quality where prioritisation of improvements is required. This is supported by:

Local Plan Part 2 Policy DME1 14

A) Development proposals should demonstrate appropriate reductions in emissions to sustain compliance with and contribute towards meeting EU limit values and national air quality objectives for pollutants.

B) Development proposals should, as a minimum:



- i) be at least “air quality neutral”;
- ii) include sufficient mitigation to ensure there is no unacceptable risk from air pollution to sensitive receptors, both existing and new; and
- iii) actively contribute towards the continued improvement of air quality, especially within the Air Quality Management Area.

Name

Title



The simplified formula is $\{(E + J + O + T) \times 40.568079205\}$						
Calculation of Benchmark emissions						
			Emissions (g/veh/km)		Total Emissions (Kg)	
Land Use	Benchmark trip rate	Average distance per trip	NOx	PM2.5	NOx	PM2.5
Schools, nurseries, doctors' surgeries, other non- residential in:	78361.56	10.8	0.35	0.028	296.2	23.7
TOTAL BENCHMARK EMISSIONS					296.2	23.7
Calculation of Development emissions						
			Emissions (g/veh/km)		Total Emissions (Kg)	
Land Use	Proposed trip rate	Average distance per trip	NOx	PM2.5	NOx	PM2.5
Schools, nurseries, doctors' surgeries, other non- residential in:	91,250	10.8	0.35	0.028	344.9	27.6
TOTAL DEVELOPMENT EMISSIONS					344.9	27.6
Calculation of Excess emissions and offsetting payment						
	Benchmarks	Total Emissions	Excess Emissions	Damage cost	Annual offsetting amount	
		(tonnes per annum)		£ per tonne	(£)	
Transport NOx emissions	0.296	0.345	0.049	£40,048	£1,951.07	
Transport PM2.5 emissions	0.024	0.028	0.004	£353,225	£1,376.68	
TOTAL OFFSETTING		£135,001	as per the London Plan Air Quality 2023 guidance			
Travel Plan - 10% discount		£13,500				
Green Measures - 5% discount		£0				
Contribution to Long Term Strategic LBH Projects - 15% discount		£0				
Total Discount		£13,500				
\$106 Due		£121,500				