

Pentavia Retail Park, Mill Hill

in the London Borough of Barnet

planning application no. 17/8102/FUL

Planning application

Town & Country Planning Act 1990 (as amended); Greater London Authority Acts 1999 and 2007; Town & Country Planning (Mayor of London) Order 2008 (“the Order”) and Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

The proposal

Redevelopment of site including the demolition of all existing buildings and construction of 844 residential units, 885 sq.m. of ancillary residential floorspace; 1,028 sq.m. of non-residential floorspace (in Class A1, A3, A4 and D1 use), within buildings ranging in height from 4 to 16 storeys, together with the provision of a new pedestrian accesses off Bunns Lane, open space, landscaping, car parking, acoustic mitigation and highway/pedestrian improvements.

The applicant

The applicant is **Meadow Residential** and the architect is **AFK**

Recommendation summary

The Mayor, acting as Local Planning Authority for the purpose of determining this application;

- i. grants conditional planning permission in respect of application 17/8102/FUL for the reasons set out in the reasons for approval section below, and subject to the prior completion of a section 106 legal agreement;
- ii. delegates authority to the Chief Planner to issue the planning permission and attach, add, delete or vary, the final detailed wording of the conditions and informatives as required, and authority to negotiate, agree the final wording, and sign and execute, the section 106 legal agreement;
- iii. delegates authority to the Chief Planner to agree any variations to the proposed heads of terms for the section 106 legal agreement;
- iv. delegates authority to the Chief Planner to refuse planning permission, if by 25 October 2019, the section 106 legal agreement has not been completed;

- v. notes that approval of details pursuant to conditions imposed on the planning permission will be submitted to, and determined by Barnet Council;
- vi. notes that Barnet Council will be responsible for the enforcement of the conditions attached to the planning permission;

Subject to referral to the Secretary of State for Housing, Communities and Local Government under The Town and Country Planning (Consultation) (England) Direction 2009.

Drawing numbers and documents

Proposed drawings (17 May 2019 Addendum)	
Site plans	
A_44032_MH - A01-00-01 - LOCATION PLAN	A_44032_MH - A01-00-03 - SITE PLAN Ground Floor
A_44032_MH - A01-00-04 - SITE PLAN Lower Ground Floor	A_44032_MH - A10-00-01 - GA_LEVEL 00_OVERALL PLAN
A_44032_MH - A10-01-01 - GA_LEVEL 01_OVERALL PLAN	A_44032_MH - A10-02-01 - GA_LEVEL 02_OVERALL PLAN
A_44032_MH - A10-03-01 - GA_LEVEL 03_OVERALL PLAN	A_44032_MH - A10-04-01 - GA_LEVEL 04_OVERALL PLAN
A_44032_MH - A10-05-01 - GA_LEVEL 05_OVERALL PLAN	A_44032_MH - A10-06-01 - GA_LEVEL 06_OVERALL PLAN
A_44032_MH - A10-07-01 - GA_LEVEL 07_OVERALL PLAN	A_44032_MH - A10-08-01 - GA_LEVEL 08_OVERALL PLAN
A_44032_MH - A10-09-01 - GA_LEVEL 09_OVERALL PLAN	A_44032_MH - A10-10-01 - GA_LEVEL 10_OVERALL PLAN
A_44032_MH - A10-11-01 - GA_LEVEL 11_OVERALL PLAN	A_44032_MH - A10-12-01 - GA_LEVEL 12_OVERALL PLAN
A_44032_MH - A10-13-01 - GA_LEVEL 13-14_OVERALL PLAN	A_44032_MH - A10-15-01 - GA_LEVEL ROOF_OVERALL PLAN
A_44032_MH - A10-LG-01 - GA_LEVEL LG_OVERALL PLAN	A_44032_MH - A11-00-01 - LEVEL 00_SHEET 01
A_44032_MH - A11-00-02 - LEVEL 00_SHEET 02	A_44032_MH - A11-00-03 - LEVEL 00_SHEET 03
A_44032_MH - A11-00-04 - LEVEL 00_SHEET 04	A_44032_MH - A11-00-05 - LEVEL 00_SHEET 05
A_44032_MH - A11-00-06 - LEVEL 00_SHEET 06	A_44032_MH - A11-00-07 - LEVEL 00_SHEET 07
A_44032_MH - A11-00-08 - LEVEL 00_SHEET 08	A_44032_MH - A11-03-01 - LEVEL 03_SHEET 01
A_44032_MH - A11-03-02 - LEVEL 03_SHEET 02	A_44032_MH - A11-03-03 - LEVEL 03_SHEET 03
A_44032_MH - A11-03-04 - LEVEL 03_SHEET 04	A_44032_MH - A11-03-05 - LEVEL 03_SHEET 05
A_44032_MH - A11-03-06 - LEVEL 03_SHEET 06	A_44032_MH - A11-03-07 - LEVEL 03_SHEET 07
A_44032_MH - A11-03-08 - LEVEL 03_SHEET 08	
Proposed Sections (17 May 2019 Addendum)	
A_44032_MH - A25-10-01 - SECTION AA BB CC	A_44032_MH - A25-10-01 - SECTION DD
A_44032_MH - A25-10-02 - SECTION EE - southern entrance	A_44032_MH - A25-10-03 - SECTION FF - through Block R

A_44032_MH - A25-10-04 - SECTION GG	A_44032_MH - A25-10-05 - SECTION HH
A_44032_MH - A25-10-06 - SECTION II	
Proposed Elevations (17 May 2019 Addendum)	
A_44032_MH - A20-00-01 - OVERALL ELEVATIONS_OUTWARDS	A_44032_MH - A20-00-02 - OVERALL ELEVATIONS_INWARDS
Supporting documents (May 2019)	
A_44032_MH - A00-00-05 - Unit types	Housing Delivery Statement Addendum (Version 14)
A_44032_MH - A00-00-04 - Accommodation schedule	Internal Daylight Addendum
Statement of architectural changes	Energy Statement Addendum
A_44032_MH - A01-00-09 - Tenure mix typical level	Overheating Assessment
Pentavia Mill Hill - Phasing Plan	Transport Assessment Addendum
Pentavia Mill Hill - Strategic Phasing Programme	AFK drawing - GA_LEVEL ROOF_Distance to motorways
Supporting documents (29 March 2019)	
Mill Hill DAS_Landscape Chapter_Play (update 29 March)	ES - Socio Economics Chapter (Update 29 March)
Supporting documents (25 March 2019)	
Planning Statement	Daylight, Sunlight and Overshadowing Assessment
Design and Access Statement	Solar Glare Assessment
Environmental Statement - Non-technical summary and Volumes 1 and 2	Flood Risk Assessment (including Drainage Strategy)
Sustainability Statement	Ground Investigations Report
Energy Statement	Heritage Statement
Outline Waste Management Strategy	Archaeological Desk Based Assessment
Utilities Assessment	Statement of Community Involvement
Arboricultural Statement	Visibility and Light Pollution Study
Management Strategy	Planning application form and cover letter

Introduction

1 Having assumed authority to determine this planning application, this report sets out the matters that the Mayor must consider in forming a view over whether to grant or refuse planning permission and to guide his decision making at the upcoming representation hearing. This report includes a recommendation from GLA officers, as set out below.

Officer recommendation - reasons for approval

2 The Mayor, acting as the local planning authority, has considered the particular circumstances of this application against national, strategic and local planning policy, relevant supplementary planning guidance and all material planning considerations. He has also had regard to Barnet Council's committee report dated 25 July 2018 (as updated by Barnet Council's supplementary addendum), the draft decision notice setting out three reasons for refusal and all consultation responses and representations made on the case both to Barnet Council and the GLA. The below reasons set out why this application is acceptable in planning policy terms:

- i. The comprehensive redevelopment of this under-utilised out of town retail park site to provide a high density residential-led mixed use redevelopment, including appropriate levels of commercial and community use, strongly accords with London Plan Policy 3.3, 2.15, 4.7 and Policies H1, SD6, SD7 and SD8 of the draft London Plan, Barnet Local Plan Policies CS3, CS4, CS6, DM11, DM14, as well as the land use and development objectives set out in the Pentavia Retail Park Planning Brief (2016).
- ii. The scheme would provide 844 residential units, of which 345 would be affordable (41%). This would include a policy compliant tenure split between low cost rent and intermediate housing, with London Affordable Rent, Discount Market Rent, London Living Rent and London Shared Ownership units proposed alongside market sale and Build to Rent units. The proposed affordable housing offer meets the requirements of the Mayor's Affordable Housing & Viability SPG and draft London Plan and is therefore eligible for the 'Fast Track Route'. An early implementation viability review mechanism will be triggered, should an agreed level of progress not be made within 2 year of planning permission being granted. A 'with grant scenario' is secured in the Section 106 which would increase the level of overall affordable housing to 45% by unit and habitable room should grant be made available through the provision of additional intermediate units. The affordability levels comply with the London Plan and would be secured in perpetuity. The proposed Build to Rent units would be appropriately secured by way of a 15 year covenant, with necessary requirements in relation to clawback, tenancies and unified ownership and management secured. The housing proposed is of an acceptable quality, and of an appropriate density and mix for the location, taking into account the characteristics of the site. The scheme would therefore make a significant contribution towards housing and affordable housing delivery targets and meeting local and strategic housing need, both for both market and affordable housing. On this basis, the application accords with London Plan Policies 3.3, 3.4, 3.5, 3.8, 3.9, 3.11 and 3.12; the Mayor's Housing SPG (2016) and the Mayor's Affordable Housing & Viability SPG (2017); draft London Plan Policies GG4, D4, , D6, H1, H5, H6, H7, Barnet Local Plan Policies CS4, DM08, DM10 and the Pentavia Retail Park Planning Brief (2016).
- iii. The application proposes tall buildings outside of the 'strategic locations' listed in Policy CS5 and DM05 of the Barnet Local Plan as being potentially suitable for tall buildings and in a location where the above policies state that tall buildings will not be supported. The proposed development therefore conflicts with Barnet Local Plan Policies CS5 and DM05 and represents a departure from the Development Plan. However, in this instance, GLA officers consider that there are material considerations to justify a departure from Barnet's Local Plan Policies CS5

and DM05 in respect of tall buildings, taking into account the design impacts of the development and the wider public benefits in terms of the scheme's substantial contribution towards achieving both local and strategic targets for overall and affordable housing and optimising the development of an under-utilised, brownfield site. Whilst the proposal would mark a departure from the prevailing form and density of development in the locality, and a departure from Barnet Local Plan policy concerning appropriate locations for tall buildings, the height and massing of the development is considered acceptable in this instance and would not give rise to any harm. The segregated nature of the site and its surrounding topography as well as the design quality of the scheme would mean that the character of the surrounding area would not be adversely affected by the proposals. The application would not adversely impact local or strategic views, Barnet's skyline and would not harm the significance of the nearby Watling Estate Conservation Area or Mill Hill Conservation Area or any other heritage assets. The varied height and massing of the scheme, including the architectural approach and the proposed use of high quality brick and stone materials would ensure the provision of a good quality, visually distinctive and cohesive scheme which responds appropriately to the surrounding context. The proposed tall and large buildings in this location would not give rise to any unacceptable adverse impacts on local microclimatic in terms of wind, pedestrian comfort levels or solar glare. The design and layout of the scheme is well-considered and fully optimises the development potential of the site, whilst successfully resolving the environmental and site access constraints associated with the site's proximity to major roads. The potential for the site to integrate with the surrounding area has been maximised given the existing site constraints and the proposed landscaping, public realm and amenity spaces would be of a high quality. On this basis, the application accords with London Plan Policies 3.5, 3.6, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, the Housing SPG (2016), Policies D1, D2, D3, D4, D5, D6, D7, D8, D11 of the draft London Plan and generally accords with Barnet Local Plan Policies DM01, DM02, DM03, DM05, CS5 and the overall urban design objectives set out in the Pentavia Retail Park Planning Brief (2016). Where there is clearly a conflict with Barnet Local Plan Policies CS5 and DM05 and the Pentavia Retail Park Planning Brief (2016) in terms of the site's location and the proposal for tall buildings, GLA officers are satisfied that the proposed tall buildings are acceptable and that the other material considerations set out above outweigh the scheme's conflict with the above Development Plan policies and supporting guidance.

- iv. The application would achieve a high level of accessible and inclusive design and would comply with London Plan Policies 3.8, 6.13, 7.1, 7.2, 7.5 7.6, draft London Plan Policies GG1, D3, D5, T6.1, T6.5, the Accessible London SPG and Barnet Local Plan policy DM02 and DM03, together with the aspirations for inclusive and accessible design set out in the Pentavia Retail Park Planning Brief (2016).
- v. The application would not have an unacceptable impact on the residential amenity of existing residents close to the site. Few neighbouring residential properties would experience any noticeable reductions to their daylight and sunlight and where there would be a reduction to the existing baseline levels, the impacts would not have an unacceptable impact on residential amenity. The impacts in relation to privacy and overlooking, and light spillage are acceptable. As such, the application complies with London Plan Policies 7.6, 7.7 and 7.15, and Barnet Policies CS5, DM01, DM02 and DM05.
- vi. The proposed acoustic design, sound insulation and noise mitigation measures are appropriate and the residual noise levels expected to be achieved within internal residential units and external private, communal and public open amenity spaces would comply with the relevant British Standards set out in Barnet's Sustainable Design and Construction SPD and an acceptable overall noise environment would be achieved as part of the scheme. On this basis, and subject to these measures being secured by condition, the application complies with the requirements of London Plan Policy 7.15, Policy D13 of the draft London Plan, Barnet Local Plan Policy DM04.

- vii. The proposed mitigation and control measures in relation to air quality are appropriate and, subject to these being secured by condition, the application would provide an acceptable standard of residential accommodation, in line with UK Air Quality Objective value limits. The cumulative impacts on local air quality would be acceptable. The application therefore accords with the requirements of London Plan Policy 7.14, Policy SI1 of the draft London Plan and Barnet Local Plan Policies CS13 and DM04.
- viii. The proposed development has demonstrated that a high standard of sustainable design and construction would be achieved, minimising carbon dioxide emissions, using energy efficiently and including renewable energy, in accordance with the London Plan energy hierarchy. The development would deliver sustainable urban drainage, ecology and urban greening benefits over the existing situation at the site. As such the scheme complies with the policies contained with Chapter 5 and Policies 7.7, and 7.19 of the London Plan; Policies GG3, G4, G5, G6, G7, SI1, SI2, SI3, SI4, SI5, SI7, SI8, SI12, SI13 of the draft London Plan, Sustainable Design and Construction SPG, and Barnet Local Plan Policies DM02 and DM04.
- ix. The level of parking provision proposed complies with the maximum standards in the London Plan and Barnet Local Plan and would strike an appropriate balance between accommodating private car use in a low PTAL suburban location whilst promoting sustainable and active travel and limiting the impact of the development on the local highway network, with appropriate mitigation measures secured to ensure any potential issues in terms of overspill parking could be appropriately addressed through the introduction of additional Controlled Parking Zone (CPZ) controls should this be considered appropriate locally. An appropriate package of transport mitigation measures is proposed in terms of walking, cycling, bus capacity improvements, improved access to bus stops, together with travel plan incentives to encourage modal shift from the outset. Cycle parking provision complies with the standards in the draft London Plan. Highways impacts in terms of traffic congestion, safety, deliveries, servicing, construction and access are acceptable with details of which secured by conditions. Subject to the transport mitigation measures being delivered, the application supports the transport objectives set out in the Pentavia Retail Park Planning Brief and accords with the transport policies in the London Plan, draft London Plan and Barnet Local Plan.
- x. The Environmental Statement (ES) and addendum provides an assessment of the likely significant effects of the proposal on the environment during the construction and operational phases. The ES, addendum and supporting documents comply with the relevant regulations in terms of their scope and methodology for assessment and reporting. The supporting documents in particular also appropriately respond to and address Development Plan policy, supplementary planning guidance and the representations made. As is usual for a major development of this nature there are potential environmental impacts and, where appropriate, mitigation has been identified to address adverse impacts. The general residual impact of the development with mitigation is considered to range from negligible to minor beneficial throughout most of the site. Given the context of the site, the environmental impact of the development is acceptable in view of the general compliance with relevant, London Plan and local policy standards and where applicable, the relevant British Standards.
- xi. Appropriate, relevant, reasonable and necessary planning conditions and planning obligations are proposed to ensure that the development is acceptable in planning terms and the environmental, and socio-economic impacts are mitigated, in line with London Plan Policy 8.2, Barnet Local Plan Policy CS15 and Barnet's Planning Obligations SPD (2013).
- xii. Accordingly, the proposals are considered to accord with the development plan when considered as a whole and, on balance, the other relevant material considerations which point towards refusal are not sufficient to justify refusal of planning permission.

Recommendation

3 That the Mayor acting as Local Planning Authority, grants planning permission in respect of application 17/8102/FUL, subject to referral to the Secretary of State, the prior completion of a section 106 legal agreement, and the inclusion of planning conditions and informatives, as summarised below. The detailed wording of conditions and informatives are set out in the draft decision notice appended to this report.

4 That the Mayor delegates authority to the Chief Planner to issue the planning permission and attach, add, delete or vary the final wording of the conditions and informatives as required.

5 That the Mayor agrees that the Chief Planner, be given delegated authority to negotiate and complete the section 106 legal agreement, the principles of which have been agreed with the applicant as set out in the heads of terms detailed below.

6 That the Mayor delegates authority to the Chief Planner to refuse planning permission if, by 25 October 2019, the section 106 legal agreement has not been completed

7 That the Mayor notes the approval of details pursuant to conditions imposed on the planning permission will be submitted to, and determined by, Barnet Council (the "Council").

8 That the Mayor notes that the Council will be responsible for the enforcement of the conditions attached to the permission.

Section 106 Legal agreement

9 The following heads of terms have been agreed as a basis for the planning obligations to be contained within the Section 106 legal agreement.

Affordable housing

10 The following affordable housing obligations would be secured by legal agreement:

- 'Baseline' affordable housing provision of 345 affordable units (41% by both unit and habitable room), comprising: 131 Discount Market Rent (DMR) units, 57 DMR units at London Living Rent (LLR) levels, 94 London Affordable Rent (LAR) units and 63 London Shared Ownership (LSO) units, in accordance with the following approved unit mix:

	DMR	DMR (at LLR)	London Affordable Rent	Shared ownership	Total
1 Bedroom	50	21	21	22	114
2 Bedroom	63	30	53	39	185
3 Bedroom	18	6	20	2	46
Total	131	57	94	63	345

- an agreed schedule of affordable housing delivery tenure and unit size by block.
- phasing triggers for affordable housing delivery linked to the occupation of market units (private sale or private rent) on each phase.
- a 'with grant scenario' - to incorporate an additional 35 London Shared Ownership units should GLA grant be made available – increasing the level of affordable housing to 45% by unit and habitable room.

- early stage 'non-implementation' review mechanism.
- definitions, eligibility and affordability for LAR, DMR, LLR, LSO units and retention of these units in accordance with these requirements in perpetuity.
- management of LAR by a Registered Provider, nominations agreement
- service charges for LAR and LSO units
- Build to Rent covenant and clawback and management plan
- key worker priority for DMR and LLR units and marketing and cascade arrangements

Transport

11 The following transport obligations would be secured by legal agreement:

- a financial contribution of £475,000 for local bus service enhancements
- delivery of two new pedestrian and cycle accesses on Bunns Lane, together with the proposed new footway and crossing facilities on the existing A1 slip road linking to the M1 footbridge, together with the delivery of the central north-south route referred to as 'Mill Hill Walk' and the proposed pedestrian and cycle route alongside the M1 boundary.
- the provision of two new bus stops and shelters on Bunns Lane and the re-location of one bus stop on the A1 (northbound).
- qualitative enhancements to the Grahame Park Way railway underpass, M1 footbridge, Bunns Lane railway bridge and M1 underpass, Bunns Lane A1 underpass and the A1 underpass at Tithe Walk.
- a commensurate financial contribution towards pedestrian and cycle crossings at A1 Five Ways Corner.
- a commensurate financial contribution towards the proposed junction enhancements at Bunn's Lane/Pursley Road/Page Street roundabout.
- Financial contributions toward enhanced pedestrian crossing facilities on Grahame Park Way (south of mini roundabout with Bunn's Lane to provide enhanced access to the Orion Primary School).
- Residential travel plan, with monitoring contributions of £20,000, together with travel plan incentives for each first household, capped at a maximum of £253,200 in total, with each first household to be offered the option of selecting two of the following three incentives (to a maximum of £300):
 - Oyster card with £150 credit
 - Cycle shop voucher to the value of £150
 - Car club credit/membership to the value of £150
- Commercial travel plan, with monitoring contributions of £15,000.
- 5 car club spaces, together with a wayfinding strategy, Legible London signage
- Funding for two rounds of public consultation on a local Controlled Parking Zone (CPZ) and the associated initial implementation costs associated with traffic management order and replacement signage and road markings, together with a restriction on future residents being eligible for permit within this CPZ.

Other obligations:

- Financial contribution of £1,155,600 towards improvements in primary school capacity in the local area.
- Completion and ongoing maintenance of all public open spaces and public routes, with continued unrestricted public access to the proposed pedestrian and cycle routes within the scheme.
- Carbon off-set payment of £1,025,649 (subject to a revised energy strategy being submitted).
- Provisions to future proof the site to enable connection to a district heat network.
- Local employment, training and skills obligations covering the construction period.
- Section 106 monitoring fee, dispute resolution provisions and provisions for repayment of unspent financial contributions

Conditions to be secured ¹

12 The following list provides summary of the subject matter of the conditions and informatives to be attached to any planning permission which is to be granted:

1. Time limit for commencement
2. Approved plans and documents
3. Phasing plan
4. TfL and Highways England infrastructure asset protection (detailed engineering and construction design and method statement)
5. Below ground utilities infrastructure
6. Construction Environmental Management and Logistics Plan
7. Demolition and Construction Waste Management Plan
8. Land contamination
9. Contamination not previously identified
10. Final drainage design
11. Drainage management
12. Rainwater and grey water recycling feasibility
13. Water supply capacity
14. Water consumption
15. Sealed windows
16. Internal noise levels within residential units
17. Mechanical Ventilation Heat Recovery System
18. Noise fixed plant
19. Building and site management
20. Operational waste management and recycling strategy
21. Solar glare
22. Detailed elevations, materials, balconies, winter gardens and privacy screens
23. Roof level structures
24. Landscaping, public realm, plays space and boundary treatments
25. Environmental barrier alongside the M1 motorway
26. Works to the existing trees during the construction of site accesses on Bunns Lane
27. Communal rooftop gardens and green/brown roofs
28. Horticultural management plan
29. Replacement trees
30. Lighting strategy

¹ Draft conditions have been prepared and will be published as an appendix to this report; this list provides a summary of the draft notice condition headings

31. Fire Safety
32. Ground floor glazing
33. Accessible and adaptable dwellings
34. Maximum floorspace in Class A1 retail use
35. Maximum floorspace in Class A3/A3 restaurant/cafe/drinking establishment use
36. Minimum floorspace in Class D1 community use
37. Opening hours
38. Car Parking Management Plan
39. Cycle Parking Provision
40. Highways design
41. Highways design (vulnerable road users)
42. Delivery and Servicing Plan
43. Submission and approval of a final energy strategy
44. Sustainability standards for non-residential uses

Informatives

- 1. S106 agreement
- 2. CIL
- 3. Thames Water
- 4. Engagement with Highways England and Transport for London
- 5. Deemed discharge
- 6. Pre-commencement conditions

Publication protocol

13 This report has been published seven clear days prior to the Representation Hearing, in accordance with the GLA procedure for Representation Hearings. Where necessary, an addendum to this report will be published on the day of the Representation Hearing. This report, any addendum, draft decision notices and the Mayor of London's decision on this case will be made available on the GLA website:

<https://www.london.gov.uk/what-we-do/planning/planning-applications-and-decisions/public-hearings/pentavia-retail-park-public-hearing>

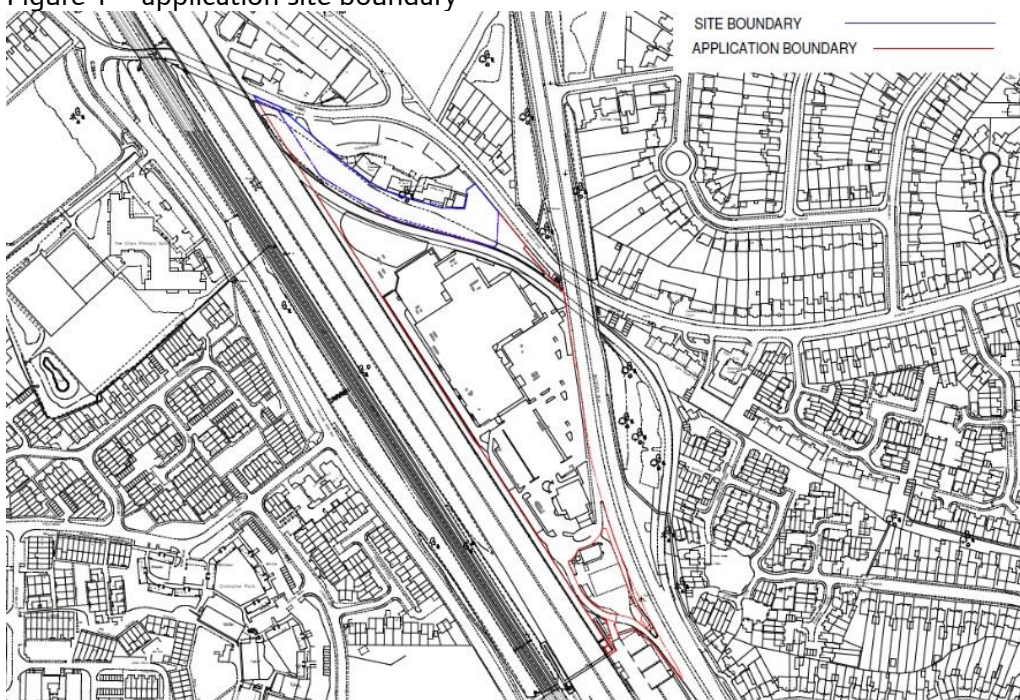
Site description

14 The Pentavia Retail Park site is 3.87 hectares in size and is located in Mill Hill in the London Borough of Barnet. The site is bounded by the A1 (Watford Way) to the east; the M1 motorway to the west; a petrol station to the south; and by Bunns Lane and a tree lined embankment to the north. Constructed in the early 1990s, the site is broadly triangular in shape and includes one large footprint retail warehouse building, divided into three units, which is located on the wider northern section of the site and a smaller restaurant building to the south adjacent to the site entrance. These two buildings are separated by a wide expanse of surface car parking. The site was previously occupied by large retailers such as Homebase, Argos and Comet and a TGI Friday restaurant; however, these outlets have closed. Since 2015, one of the retail units has been occupied by the Kosher Outlet Store and, since 2017, one of the units has been temporarily occupied by the charity, Together Plan. The restaurant building is currently vacant. A loading area is located to the north of the existing retail buildings which is accessed via a service road which runs parallel to site's western boundary alongside the M1.

15 As shown in Figure 1, the application site boundary extends to the north include two sections of the landscaped embankment to allow for the provision of two new pedestrian and cycle accesses on Bunns Lane. This relatively steep section of landscaping screens the existing retail park from view on Bunns Lane and provides a buffer between the site and the adjacent nursery and residential properties at Rosebery Place. This land also includes the former M1-A1 link road, which has been disused for a number of years and is within sunken overgrown land. The remaining extent of the landscape buffer would be retained and lies outside the application site boundary. To the south, the application boundary is extended to include the slip road and roundabout which provide access on and off the A1 (northbound). The petrol station includes a convenience store and car wash facility and is excluded from the site boundary as it is in separate ownership.

16 The site's current Public Transport Access Level (PTAL) varies from 1a to 1b (on a scale of 0 to 6b, where 6b is the most accessible), with the majority of the site covered by PTAL 1b. A section of the northern part of the site could achieve a PTAL of 3 if a direct pedestrian access to Bunns Lane was provided. The nearest station is Mill Hill Broadway, which is approximately 1 kilometre from the site to the north and provides access to Thameslink rail services to West Hampstead, London St Pancras, London Blackfriars and Wimbledon, as well as St Albans, Luton, Sutton, Bedford, Brighton and Kent. The site is served by two bus routes – the 113 which operates along the A1 Watford Way and the 221 which runs along Bunns Lane. The site is relatively remote from the nearest underground station, with Mill Hill East, Burnt Oak and Colindale on the Northern Line all over 2 kilometers away (beyond walking distance).

Figure 1 – application site boundary



17 The site has a challenging environmental context in terms of noise, air quality and site access, given its close proximity to the A1, M1 and Midland Mainline Railway and the manner in which these major transport routes effectively sandwich the site and create severance issues in terms of pedestrian, cycle movement and access to public transport services. The A1 forms part of the Transport for London Road Network (TLRN) and along this section comprises a three lane dual carriageway, with a speed limit of 50 miles per hour. Pedestrians and cyclists share the footway on the western side of the A1. The M1 motorway is part of England's motorway network for which the highway authority is Highways England. Bunn's Lane, which is a local authority road. The A1 rises up onto a bridge structure as it extends over Bunns Lane in this location.

18 The site is served by a single vehicular access point on the A1 (northbound) via a one-way entry and exit slip road and a mini roundabout to the south, which is shared with the adjacent petrol station and Nissan car show room. Currently, there is no direct access to the site from Bunns Lane; however, an indirect pedestrian route is available via a set of stairs onto the A1 (northbound) footway. A steeper ramp access onto the A1 is located on the other side of Bunns Lane but would not meet current standards in terms of access and gradient. To the west, an elevated pedestrian footbridge provides access over the M1 motorway via steps and a ramp access which is located to the south of the site, adjacent to the existing petrol station. This route links to Grahame Park Way via a pedestrian underpass below the Midland Mainland Railway. To the south, a pedestrian underpass also extends under the A1 which is accessed adjacent to the Nissan car show room via ramp and stairs and provides access to the A1 (southbound) bus route and the residential area to the east of the A1 via Tithe Walk.

19 In terms of topography, the existing levels across the site vary from 69 metres AOD in the north-western corner of the site to 62 metres AOD in the south-eastern corner of the site. There is a change in level between Bunns Lane and the northern boundary of the existing retail park, which ranges from 3 to 5 metres. The M1 carriageway is on slightly lower ground, approximately 1.5 metres below the existing level of the site; however, the A1 rises up in height adjacent to the site as it clears the bridge over Bunns Lane, this creates a 3 metre level difference between the existing height of the A1 at this section and the ground floor level of the adjacent existing retail buildings. A wooden fence runs along the boundary with the M1 but is in need of repair and there is little in the way of landscaping or tree planting along either side of the site. The topography of the wider area falls to the south and west to around 30 metres AOD and rises to the north and east towards Mill Hill, to an elevation of around 120 metres AOD.

20 The site is not subject to any specific local planning policy designations and is not allocated for housing. Beyond the major roads which bound the site, the surrounding area to the north, east and west is predominantly in residential use, comprising two and three storey residential properties. Two designated Locally Significant Industrial Sites (LSIS) are located to the north of the site - Mill Hill Industrial Estate and Bunns Lane Works. Mill Hill Park is located to the north and is designated Green Belt. The area of land east of the A1 is owned by TfL and used for highway maintenance. The area to the west of the M1 is within the Colindale Burnt Oak Opportunity Area.

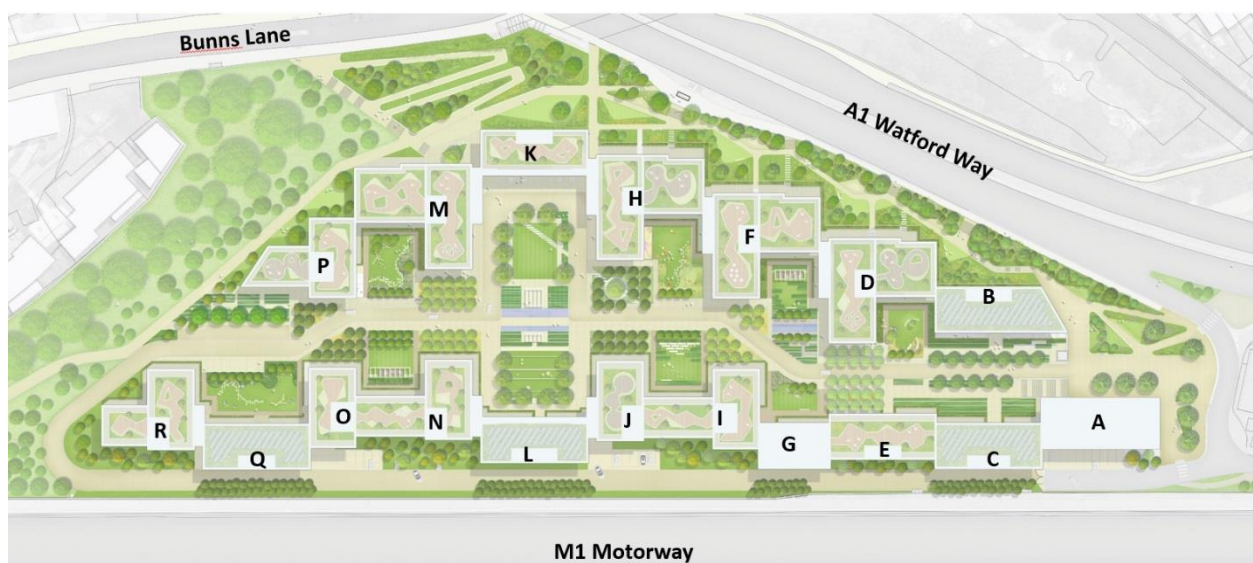
21 The site does not lie within a conservation area and there are no listed buildings within the site. The Watling Estate Conservation Area is 350 metres away to the west and is separated from the site by the M1 and Midlands Mainline Railway. The Mill Hill Conservation Area is approximately 850 metres to the north. The northern part of the site lies close to the designated 'Viewing Corridor A, from Mill Hill Field towards Harrow on the Hill, which is identified as an important local view in Barnet's Local Plan Core Strategy. The Pentavia Retail Park is located approximately 500 metres south of the UCL Observatory in Mill Hill which is operated by UCL's Department of Physics and Astronomy.

Details of the proposal

22 The application seeks full (detailed) permission for the demolition of the existing buildings on the site and the redevelopment of the site to construct 844 residential units, 885 sq.m. of ancillary residential floorspace; 1,028 sq.m. of non-residential floorspace (in Class A1, A3, A4 and D1 use), together with the provision of new pedestrian accesses off Bunns Lane, open space, landscaping, car parking, acoustic mitigation and highway/pedestrian improvements.

23 The development would comprise 18 individual blocks predominantly in residential use ranging in height between 4 and 16 storeys. A series of linear and right angled blocks are proposed which would be laid out in two staggered lines alongside the M1 and A1 in order to enclose and shelter an internal public courtyard, as shown below in Figure 2.

Figure 2 – Proposed layout



24 The massing of the scheme varies with buildings ranging in height between 4 and 16 storeys. The tallest 16 storey building would be provided at Block A at the south of the site, with Block B opposite comprising a 12 storey building. These two buildings would frame the southern entrance to the site and public courtyard. Taller buildings ranging in height between 10 to 13 storeys are proposed to be interspersed across the scheme and located within Blocks C, D, F, G, K, J, L, and Q, with the remaining blocks stepped down in height to between 4 and 8 storeys to provide an undulating massing and to reduce the height where Blocks R, P and M are adjacent to Bunns Lane. A summary of the proposed building heights are set out in Table 1 below.

Table 1 – proposed building heights

Block	Levels	Total storeys	Building height (from finished ground floor level within the site)
A	LG+G+14	16	46.8 to 52.65 metres
B	LG+G+10	12	34.4 to 40.25 metres
C	G+9	10	31.3 metres
D	G+6 and G+10	7 and 11	22 to 34.4 metres
E	G+7	8	25.1 metres
F	G+5 and G+9	6 and 10	18.9 to 31.3 metres
G	G+11	12	37.5 metres
H	G+5 and G+7	6 and 8	18.9 to 25.1 metres
I	G+5 and G+7	6 and 8	18.9 to 25.1 metres
J	G+5 and G+9	6 and 10	18.9 to 31.1 metres
K	G+10	11	34.4 metres
L	G+12	13	40.6 metres
M	G+4 and G+6	5 and 7	15.8 to 22 metres
N	G+4 and G+7	5 and 8	15.8 to 25.1 metres
O	G+4 and G+7	5 and 8	15.8 to 25.1 metres

P	G+3 and G+6	4 and 7	12.7 to 22 metres
Q	G+10	11	34.4 metres
R	G+4 and G+6	5 and 7	15.8 to 22 metres

25 In terms of the proposed commercial floorspace, a 248 sq.m. unit in Class A1 retail use is proposed at lower ground floor level within Block A fronting the southern entrance to the site, with the remaining commercial floorspace spread across four separate ground floor units on Blocks M, K and F, which front the internal courtyard. In addition to this, 297 sq.m. of Class D1 community floorspace is proposed within ground floor units in Blocks H and K fronting the courtyard. Units in ancillary residential use are proposed within Blocks B, D, M, H and P. The applicant has stated that these are expected to comprise uses such as a gym, concierge, post/deliveries office, site management facility, maintenance office, workspace hub and residents lounge and meeting space.

26 A total of 366 residential car parking spaces and 1,574 cycle parking spaces would be located within a lower ground floor level car park which would sit below the podium level courtyard and would also include refuse and recycling storage facilities. This would be accessed via the existing service road which runs adjacent to the M1, with access restricted via on-site management and gates/bollards.

27 The internal public courtyard would comprise a sequence of landscaped squares, linked by a central pedestrian route, referred to as 'Mill Hill Walk'. This would provide the main north-south route between the southern entrance to the site and Bunns Lane to the north, with access to communal core entrances and commercial and community uses provided via a secondary network of paths around the perimeter of buildings and individual courtyard squares. Vehicle access onto Mill Hill Walk would be restricted via on-site management and limited to essential deliveries, servicing and refuse and recycling collection vehicles.

28 In terms of site access, a new dedicated pedestrian and cycle access would be provided to connect the site to Bunns Lane to the north, which would punch through into the internal courtyard via a double height arched walkway located between Blocks M and K. Due to the change in levels from the site down to Bunns Lane, this route would include a 3.5 metre wide direct stepped access as well as a 2.5 metre wide Equalities Act compliant ramp to provide step free access for disabled people, cyclists and those with mobility needs, with a total of three switch backs. In addition to this, a secondary 3 metre wide pedestrian and cycle access to the north of the site is proposed which would join Bunns Lane to the east of the underpass below the M1. Pedestrian and cycle routes would also run along the proposed new landscape corridor adjacent to the A1 and along the existing slip road running alongside the site's western boundary with the M1. Landscaping screening is proposed alongside the A1 and M1 in the form of tree and hedge planting and acoustic timber panel fencing. Blocks adjacent to the A1 would be provided with an alternative secondary core entrance to provide direct access onto proposed pedestrian route parallel with the A1.

Relevant planning history

29 The site has a substantial case history. Planning permission was originally granted in 1988 for the site for the construction of two non-food retail warehouses, a garden centre, petrol station and restaurant (LPA ref: W00408A). A Lawful Development Certificate was granted in 2008, which confirmed that the site benefits from unrestricted retail use within Class A1, as a result of conditions restricting the range of goods that could be sold having not been attached to subsequent decision notices relating to the variation of conditions on the original planning permission. In 2016, three separate retail planning applications were approved for the part demolition and part refurbishment of the site to provide Class A1 retail, Class A3 restaurant, and Class D2 (gym) uses, associated car

parking, reconfigured vehicle access and hard and soft landscaping, which were not implemented (LPA refs: 14/08075/FUL; 15/01820/FUL; 15/01825/FUL).

30 On 30 September 2016, the applicant (Meadow Residential) submitted a planning application for the residential-led mixed-use redevelopment of the site (LPA ref: 16/6420/FUL and GLA ref: D&P/3756). This application sought planning permission for the redevelopment of the site and the construction of 695 Build to Rent residential units, of which 35% were affordable (discount market rent units); 846 sq.m of Class A1 retail; 570 sq.m of Class A3/A4 use; and 289 sqm of Class D1 community use, within buildings ranging in height from 7 to 9 storeys, together with new vehicular and pedestrian access off Bunns Lane, open space, landscaping, car parking and acoustic mitigation and highway/pedestrian improvements. This application was withdrawn on 3 January 2018. Prior to the application being withdrawn, the Mayor's initial Stage 1 consultation response, issued on 5 December 2016, was supportive of the principle of the residential-led redevelopment of the site, subject to the applicant addressing concerns relating to viability and affordable housing, air quality, urban design, residential quality, townscape and visual impact and transport.

Current application

31 The current application was submitted to Barnet Council on 21 December 2017 (LPA ref: 17/8102/FUL and GLA ref: GLA/3756a). This application sought planning permission for the redevelopment of site to construct 717 new Build to Rent residential units, 745 sq.m. of ancillary residential facilities; 985 sq.m. of Class A1 retail; 558 sq.m. of Class A3 and A4 use; and 152 sq.m. of Class D1 community use, within buildings between 5 and 15 storeys, together with a new pedestrian access off Bunns Lane; open space, landscaping; car parking; acoustic mitigation and highway/pedestrian improvements.

32 Stage 1: On 5 January 2018, the Mayor of London received documents from Barnet Council notifying him of a planning application of potential strategic importance to develop the above site for the above uses. The application was referred under Category 1A and 1C of the Schedule to the Order 2008:

- *Category 1A: Development which comprises or includes the provision of more than 150 houses, flats, or houses and flats.*
- *Category 1B: Development (other than development which only comprises the provision of houses, flats or houses and flats) which comprises or includes the erection of a building outside of Central London and with a total floorspace of more than 15,000 square metres.*
- *Category 1C: Development which comprises or includes the erection of a building more than 30 metres high and is outside the City of London.*

33 On 19 March 2018, the Mayor considered planning report GLA/3756a/01. This report advised Barnet Council that, whilst the residential-led redevelopment of the site is supported in principle, the application did not comply with the London Plan or the draft London Plan and the issues raised relating to housing affordability, design, pedestrian and cycle access, public transport, energy, air quality and noise should be addressed.

34 Specifically in relation to housing, the Mayor's initial Stage 1 representation stated that the application did not, at that stage, qualify for the 'Fast Track Route' criteria for Build to Rent schemes and, as such, the applicant's Financial Viability Assessment would be interrogated by GLA officers in discussion with Barnet Council. In terms of affordability, the report stated that the proposed intermediate (DMR) rent levels must be revised to provide a range of affordable rents below 80%, including units at London Living Rent (LLR) levels. It also stated that the proposed

Build to Rent units must be subject to a 15 year covenant, with an appropriate clawback mechanism secured in any Section 106 agreement and a detailed management plan secured.

35 In relation to urban design, transport and the site's environmental constraints, the Mayor's initial Stage 1 representation required the applicant to enhance the quality and legibility of the proposed pedestrian and cycle access to the site from Bunns Lane, provide further details on pedestrian and cycle access and stated that financial contributions towards additional bus capacity should be secured, together with appropriate air quality and noise mitigation measures.

36 On 5 June 2018, the applicant submitted amendments to the proposed development. These amendments were subject to public consultation and proposed the following changes to the application:

- increasing the proposed residential units to 724 units (+7 additional residential units);
- the provision of 30% of the proposed affordable housing as Discount Market Rent units at London Living Rent levels (77 units);
- an increase in the quantum of ancillary residential floorspace to 949 sq.m. (+204 sq.m.);
- a reduction in the quantum of non-residential floorspace to 987 sq.m. (-708 sq.m.);
- alterations to the proposed housing size mix to provide 34 additional three bedroom units, 45 additional two bedroom units and a reduction in the number of 1 bedroom units (-45 units);
- design amendments to provide an enhanced site access from Bunns Lane, core accesses onto the A1 footway for the adjacent blocks and additional buffer landscaping along the A1.

37 On 25 October 2018, Barnet Council officers recommended the refusal of the application, which was unanimously endorsed by Members of the Planning Committee, in line with the officers' recommended reasons for refusal. The draft decision notice cited the following reasons for refusal:

1. *The proposed development, by virtue of its excessive height and scale would represent an over development of the site resulting in a discordant and visually obtrusive form of development that would fail to respect its local context and the pattern of development within the surrounding area, to such an extent that it would be detrimental to the character and appearance of the area. The proposal would therefore be contrary to policies CS NPPF, CS5, DM01 and DM05 of the Barnet Local Plan Core Strategy and Development Management Policies (September 2012), policies 3.4, 7.4, 7.6 and 7.7 of the London Plan (July 2011, October 2013 and January 2014) and the adopted Pentavia Retail Park Planning Brief.*
2. *In the absence of a Section 106 Agreement, the application does not include a formal undertaking to secure the planning obligations which are necessary to make the application acceptable. The application is therefore contrary to London Plan policies 3.12, 3.13, 4.3, 4.12, 6.3, 6.9, 6.10, 8.2, Policies DM10, DM14, DM17, CS4, CS15, CS8, CS9 of the Barnet Local Plan Core Strategy and Development Management Policies Document (adopted September 2012), the Barnet Planning Obligations (adopted April 2013) and Affordable Housing (adopted February 2007 and August 2010) Supplementary Planning Document, the Barnet Supplementary Planning Document on Delivering Skills, Employment and Enterprise Training (SEET) (adopted October 2014) and the Mayor's Supplementary Planning*

Guidance on Affordable Housing and Viability (2007).

3. *The proposed development would fail to provide adequate levels of affordable housing, contrary to Policy CS4 of the Barnet Core Strategy (2012), Policy DM10 of the Barnet Development Management Policies Document (2012) and Policies 3.11, 3.12 and 3.13 of the London Plan (2016)*

38 Stage 2: On 5 November 2018, the Mayor considered a planning report reference GLA/3756a/02. The report concluded that having regard to the details of the application, the development was of such a nature and scale that it would have a significant impact on the implementation of the London Plan policies on housing and affordable housing, and consequently there were sound planning reasons for the Mayor to intervene in this case and issue a direction under Article 7 of the Order that he would act as the Local Planning Authority for the purpose of determining the application. The Mayor agreed with this recommendation.

39 The GLA's Stage 2 report identified that there were outstanding matters that needed to be resolved, including delivery of the maximum level of affordable housing, urban design, transport, noise, air quality and climate change. Since the Mayor issued this direction, GLA officers have worked with the applicant to resolve the outstanding issues by securing revisions to the scheme to increase the level of affordable housing and range of affordable housing tenures proposed and the affordability levels. The scheme has been subject to an additional design review undertaken by the Mayor's Design Advocates.

40 Following the Mayor's decision to call in the application, the applicant has made the following amendments to the scheme:

- an increase in the number of residential units from 724 to 844 to provide 120 additional residential units;
- changes to the type of market homes proposed to introduce private sale units, alongside Build to Rent;
- the provision of 41% affordable housing by both unit and habitable room (increased from 35% by both unit and habitable room);
- changes to the tenure of affordable units to provide: 131 Discount Market Rent units; 57 Discount Market rent units at London Living Rent levels; 94 London Affordable Rent units; and 63 London Shared Ownership units;
- a reduction in the amount of ancillary residential facilities from 949 sq.m. to 885 sq.m. (-64 sq.m.);
- an increase in the amount of non-residential floorspace (Use Class A1, A3-A4 and D1) from 987 sq.m. to 1,028 sq.m. (+41 sq.m.);
- changes in the height of Blocks B, C, D, F, G, H, I, J, K, L, M, N, O, P, Q and R and amendments to the elevational treatment;
- a reduction in car parking from 545 spaces to 366 spaces (-179 spaces);
- an increase in cycle parking spaces from 1,182 spaces to 1,603 spaces (+421 spaces).

41 On 17 May 2019, the applicant submitted revisions to the application and additional documents in response to GLA comments and representations made during the public consultation. These revisions proposed design changes in respect of internal residential layout and communal core accesses and the provision and configuration of private amenity spaces in the form of balconies, winter gardens and landscaped terraces. Additional supporting information was provided in respect of phasing, affordable housing tenure by block transport, solar glare, a revised energy strategy and updated overheating and daylighting assessments.

42 Public consultation: has been undertaken on the proposals outlined above, in line with statutory requirements and is summarised in more detail below.

43 Site visit: The Mayor has undertaken an accompanied site visit with GLA and TfL officers, representatives from the Council and the applicant team.

44 The environmental information for the purposes of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 has been taken into account in the consideration of this case. The Mayor's decision on this case, and the reasons for it, will be made available on the GLA's website www.london.gov.uk.

Relevant legislation, policies and guidance

45 This application for planning permission must be determined by the Mayor in accordance with the requirement of Section 70(2) of the Town and Country Planning Act 1990 and Section 38(6) of the Planning and Compulsory Purchase Act 2004. In particular the Mayor is required to determine the application in accordance with the development plan unless material considerations indicate otherwise. For the purposes of Section 38(6) of the Planning and Compulsory Purchase Act 2004, the development plan in force for the area consists of the Barnet Core Strategy (2012), Development Management Policies DPD (2012) and the 2016 London Plan (Consolidated with Alterations since 2011).

46 On 1 December 2017, the Mayor published his draft London Plan for public consultation. Consultation on the plan closed on 2 March 2018. On 13 August 2018, the Mayor published a version of the draft Plan that includes his minor suggested changes. The draft London Plan was subject to an Examination in Public (EiP), which was undertaken between 15 January and 22 May 2019; however, the Inspector's report has not been published. On 16 July 2019, the Mayor published the Draft London Plan – Consolidated Suggested Changes Version (July 2019), which incorporates the suggested changes put forwards by the Mayor before, during and after the EiP sessions. In line with paragraph 48 of the NPPF, the weight attached to the draft London Plan should reflect the stage of its preparation; the extent to which there are unresolved objections to relevant policies; and the degree of consistency of the relevant policies in the emerging plan to the NPPF.

47 The Mayor is also required to have regard to national planning policy and guidance, as well as supplementary planning documents and, depending on their state of advancement, emerging elements of the development plan and other planning policies.

48 The principal matters relevant to this current application are:

- land use - including: housing, retail and town centre uses, community and social infrastructure uses;
- housing – including: delivery of affordable housing, tenure mix, housing affordability, Build to Rent housing, unit size mix, residential density, housing quality and residential standards, private open space and outdoor amenity space, play space, internal daylight, sunlight and overshadowing and noise;

- urban design – including: design review, layout, landscaping and public realm, height and massing, architectural quality and appearance, townscape and visual impact, views, heritage impact, fire safety, designing out crime;
- inclusive design;
- residential amenity impacts - including daylight and sunlight, overshadowing, privacy, noise, wind, light pollution;
- sustainability and climate change - including energy, flood risk and sustainable urban drainage, trees and urban greening, ecology and biodiversity;
- other environmental issues - including air quality, wind, waste management, contaminated land, and light pollution;
- transport – including public transport impact and mitigation, highways network impact and mitigation, car parking, cycle parking, walking and cycling access, highways safety and construction impacts.
- mitigating the impact of development through necessary planning obligations.

49 The relevant planning policies and guidance at the national, regional and local levels are noted in the following paragraphs.

National planning policy and guidance

50 The National Planning Policy Framework (NPPF) provides the Government’s overarching planning policy framework. First published in 2012, the Government published a revised NPPF in July 2018 and further revised in February 2019. The NPPF defines three dimensions to sustainable development: an economic role – contributing to building a strong, responsive and competitive economy; a social role - supporting strong, vibrant and healthy communities; and, an environmental role - contributing to protecting and enhancing the natural, built and historic environment. The sections of the NPPF which are relevant to this application are:

- 2. Achieving sustainable development
- 4. Decision-making
- 5. Delivering a sufficient supply of homes
- 6. Building a strong, competitive economy
- 7. Ensuring the vitality of town centres
- 8. Promoting healthy and safe communities
- 9. Promoting sustainable transport
- 11. Making effective use of land
- 12. Achieving well-designed places
- 14. Meeting the challenge of climate change, flooding and coastal change
- 15. Conserving and enhancing the natural environment
- 16. Conserving and enhancing the historic environment

51 A key component of the NPPF is the presumption in favour of sustainable development. In terms of decision making, this means approving applications that accord with the development plan without delay; or, where there are no relevant development plan policies, or where such policies are out-of-date, granting permission unless either: any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the NPPF as a whole; or where NPPF policies that protect areas or assets of particular importance provide a clear reason for refusing a proposed development.

52 The National Planning Practice Guidance is also a material consideration.

Spatial Development Plan and guidance

53 The London Plan 2016 is the Spatial Development Strategy for Greater London. The relevant policies within the London Plan are:

- Policy 1.1 Delivering the strategic vision and objectives for London;
- Policy 2.6 Outer London;
- Policy 2.7 Outer London: Economy;
- Policy 2.8 Outer London: Transport;
- Policy 2.15 Town centres
- Policy 2.18 Green infrastructure;
- Policy 3.1 Ensuring equal life chances for all;
- Policy 3.2 Improving health and addressing health inequalities;
- Policy 3.3 Increasing housing supply;
- Policy 3.4 Optimising housing potential;
- Policy 3.5 Quality and design of housing developments;
- Policy 3.6 Children and young people’s play and informal recreation facilities;
- Policy 3.7 Large residential developments
- Policy 3.8 Housing choice;
- Policy 3.9 Mixed and balanced communities;
- Policy 3.10 Definition of affordable housing;
- Policy 3.11 Affordable housing targets;
- Policy 3.12 Negotiating affordable housing;
- Policy 3.13 Affordable housing thresholds;
- Policy 3.16 Protection and enhancement of social infrastructure;
- Policy 3.18 Education facilities;
- Policy 4.1 Developing London’s economy;
- Policy 4.7 Retail and town centre development;
- Policy 4.8 Supporting a successful and diverse retail sector;
- Policy 4.12 Improving opportunities for all;
- Policy 5.1 Climate change mitigation;
- Policy 5.2 Minimising carbon dioxide emissions;
- Policy 5.3 Sustainable design and construction;
- Policy 5.4A Electricity and gas supply;
- Policy 5.5 Decentralised energy networks;
- Policy 5.6 Decentralised energy in development proposals;
- Policy 5.7 Renewable energy;
- Policy 5.9 Overheating and cooling;
- Policy 5.10 Urban greening;
- Policy 5.11 Green roofs and development site environs;
- Policy 5.12 Flood risk management;
- Policy 5.13 Sustainable drainage;
- Policy 5.14 Water quality and wastewater infrastructure;
- Policy 5.15 Water use and supplies;
- Policy 5.17 Waste capacity;
- Policy 5.18 Construction, excavation and demolition waste;
- Policy 5.21 Contaminated land;

- Policy 6.1 Strategic approach;
- Policy 6.2 Providing public transport capacity and safeguarding land for transport;
- Policy 6.3 Assessing the effects of development on transport capacity;
- Policy 6.5 Funding Crossrail and other strategically important transport infrastructure;
- Policy 6.7 Better streets and surface transport;
- Policy 6.9 Cycling;
- Policy 6.10 Walking;
- Policy 6.12 Road network capacity;
- Policy 6.13 Parking;
- Policy 6.14 Freight;
- Policy 7.1 Lifetime neighbourhoods;
- Policy 7.2 An inclusive environment;
- Policy 7.3 Designing out crime;
- Policy 7.4 Local character;
- Policy 7.5 Public realm;
- Policy 7.6 Architecture;
- Policy 7.7 Location and design of tall and large buildings;
- Policy 7.13 Safety, security and resilience to emergency;
- Policy 7.14 Improving air quality;
- Policy 7.15 Reducing noise and enhancing soundscapes;
- Policy 7.19 Biodiversity and access to nature;
- Policy 7.21 Trees and woodlands;
- Policy 8.2 Planning obligations; and
- Policy 8.3 Community Infrastructure Levy.

54 As set out above, policies in the draft London Plan - Consolidated Suggested Changes Version (July 2019) must be taken into account in the determination of the application, but the weight attached to these should be reflective of the criteria set out in paragraph 48 of the NPPF, which is highlighted above. The following policies in the draft London Plan are considered to be relevant:

- Policy GG1 Building strong and inclusive communities;
- Policy GG2 Making best use of land;
- Policy GG3 Creating a healthy city;
- Policy GG4 Delivering the homes Londoners need;
- Policy GG5 Growing a good economy;
- Policy GG6 Increasing efficiency and resilience;
- Policy SD1 Opportunity Areas;
- Policy SD10 Strategic and local regeneration;
- Policy D1 London's form and characteristics;
- Policy D2 Delivering good design;
- Policy D3 Inclusive design;
- Policy D4 Housing quality and standards;
- Policy D5 Accessible housing;
- Policy D6 Optimising housing density;
- Policy D7 Public realm;
- Policy D8 Tall Buildings;
- Policy D10 Safety, security and resilience to emergency;
- Policy D11 Fire Safety;

- Policy D13 Noise;
- Policy H1 Increasing housing supply;
- Policy H5 Delivering affordable housing;
- Policy H6 Threshold approach to applications;
- Policy H7 Affordable housing tenure;
- Policy H12 Housing size mix;
- Policy H13 Build to Rent
- Policy S1 Developing London’s social infrastructure;
- Policy S3 Education and childcare facilities;
- Policy S4 Play and informal recreation;
- Policy E9 Retail, markets and hot food takeaways;
- Policy E11 Skills and opportunities for all;
- Policy HC1 Heritage conservation and growth;
- Policy HC3 Strategic and local views;
- Policy G5 Urban greening;
- Policy G7 Trees and woodland;
- Policy G8 Biodiversity and access to nature;
- Policy SI1 Improving air quality;
- Policy SI2 Minimising greenhouse gas emissions;
- Policy SI3 Energy infrastructure;
- Policy SI4 Managing heat risk;
- Policy SI5 Water infrastructure;
- Policy SI7 Reducing waste and promoting a circular economy;
- Policy SI12 Flood Risk Management;
- Policy SI13 Sustainable drainage;
- Policy T1 Strategic approach to transport;
- Policy T2 Healthy streets;
- Policy T3 Transport capacity, connectivity and safeguarding;
- Policy T4 Assessing and mitigating transport impacts;
- Policy T5 Cycling;
- Policy T6 Car parking;
- Policy T6.1 Residential parking;
- Policy T6.3 Retail parking;
- Policy T6.5 Non-residential disabled persons parking;
- Policy T7 Freight and servicing;
- Policy T9 Funding transport through planning; and
- Policy DF1 Delivery of the plan and planning obligations.

55 The following published supplementary planning guidance (SPG), strategies and other documents are also relevant:

- Affordable Housing and Viability SPG (August 2017);
- Housing SPG (March 2016);
- Social Infrastructure SPG (May 2015);
- Accessible London: achieving an inclusive environment SPG (October 2014);
- The control of dust and emissions during construction and demolition SPG (July 2014);
- Shaping Neighbourhoods: character and context SPG (June 2014);
- Sustainable Design and Construction SPG (April 2014);
- Shaping Neighbourhoods: play and informal recreation SPG (September 2012);

- All London Green Grid SPG (March 2012);
- Planning for Equality and Diversity in London (October 2007);
- Mayor's Environment Strategy (May 2018);
- Mayor's Housing Strategy (May 2018); and
- Mayor's Transport Strategy (March 2018).

Local planning policy and guidance

56 Barnet Council's Core Strategy DPD (2012) and Development Management Policies DPD (2012) provide local development plan planning policies for the area. The relevant policies are:

Core Strategy DPD

- Policy CS NPPF Presumption in favour of sustainable development;
- Policy CS1 Barnet's Place Shaping Strategy;
- Policy CS3 Distribution of growth in meeting housing aspirations;
- Policy CS4 Providing quality homes and housing choice in Barnet;
- Policy CS5 Protecting and enhancing Barnet's character to create quality places;
- Policy CS6 Promoting Barnet's Town Centres;
- Policy CS7 Enhancing and protecting Barnet's open spaces;
- Policy CS8 Promoting a strong and prosperous Barnet;
- Policy CS9 Providing safe, effective and efficient travel;
- Policy CS10 Enabling inclusive and integrated community facilities and uses;
- Policy CS11 Improving health and well-being in Barnet;
- Policy CS12 Making Barnet a safer place;
- Policy CS13 Ensuring the efficient use of natural resources;
- Policy CS14 Dealing with our waste; and
- Policy CS15 Delivering the Core Strategy.

Development Management DPD

- Policy DM01 Protecting Barnet's character and amenity;
- Policy DM02 Development standards;
- Policy DM03 Accessibility and inclusive design;
- Policy DM04 Environmental considerations for development;
- Policy DM05 Tall buildings;
- Policy DM06 Barnet's heritage and conservation;
- Policy DM08 Ensuring a variety of sizes of new homes to meet housing need;
- Policy DM10 Affordable housing contributions;
- Policy DM11 Development principles for Barnet's town centres;
- Policy DM13 Community and education uses;
- Policy DM14 New and existing employment space;
- Policy DM15 Green Belt and open spaces;
- Policy DM16 Biodiversity; and
- Policy DM17 Travel impact and parking standards.

Local Supplementary Planning Documents (SPDs)

57 The following adopted SPDs are also relevant to the proposal:

- Sustainable Design and Construction SPD (Barnet Council, 2016);
- Residential Design Guidance SPD (Barnet Council, 2016);
- Delivering Skills, Employment Enterprise and Training (SEET) from development through s106 SPD (Barnet Council, 2014).
- Planning Obligations SPD (Barnet Council, 2013); and
- Affordable Housing SPD (Barnet Council, 2007, with updates).

The Pentavia Retail Park Planning Brief

58 Barnet Council has an adopted Planning Brief for the site. The Pentavia Retail Park Planning Brief was formally adopted in December 2016 and provides planning guidance on the redevelopment of the site. Though not classified as a Supplementary Planning Document (SPD), the Pentavia Retail Park Planning Brief was subject to formal six week public consultation between September and October 2016 and, as such, is considered to carry a similar level of material weight to that of an adopted SPD. The Planning Brief sets out the following objectives for the site:

- a sustainable mixed use development, creating a new place where people will choose to live with a range of new affordable homes that contribute to housing choice;
- new employment space to serve the needs of modern businesses, in particular small to medium enterprises;
- new outdoor amenity space and landscaping of a quality that enhances this location on the edge of Mill Hill;
- new and ancillary small-scale 'non-destination' retail and leisure uses that serves the needs of the new development;
- new and ancillary community space, such as a nursery, that serves the needs of Colindale and Mill Hill;
- exemplary standards of sustainable design and environmental quality in order to mitigate and adapt to the effects of a changing climate as well as respond to the challenging environmental context of the location; and
- improvements to existing transport infrastructure and creation of new pedestrian and cycle links to Mill Hill Town Centre, Colindale, Mill Hill Park, Cophall and local transport nodes.

59 The brief recognises the opportunity for mixed use development presented by the outmoded out of centre retail park but highlights the need for the redevelopment of the site to address the physical, environmental and design constraints associated with the site's proximity to major transport corridors and its location, topography and context. The Planning Brief therefore states that the introduction of residential land uses on the site is subject to any application providing:

- an innovative and exemplary design that helps to re-integrate the site with surrounding residential areas and screen it from the M1 and A1;
- appropriate mitigation measures to ensure future residents are not exposed to detrimental levels of noise and air pollution; and
- suitable and safe access for future residents through the creation of new and improved vehicular and transport connections, alongside improvements to cycling and pedestrian access.

60 In relation to urban design and townscape, the Planning Brief states that the site is not within any of the locations identified in the Local Plan as appropriate for tall buildings (8 storeys /26 metres and more in height) and states that the design and height of development should not

have an overbearing impact on the skyline, Local Viewing Corridors or adjacent conservation areas, or have a detrimental overbearing or overshadowing impact on the adjacent low rise residential properties.

Other relevant documents

61 The following conservation area character appraisals are also relevant to the application. The Mill Hill Conservation Area Character Appraisal Statement was adopted in 2008. The Watling Estate Conservation Area Character Appraisal was adopted in 2007.

Mill Hill Neighbourhood Forum and Neighbourhood Plan

62 Mill Hill Neighbourhood Area and Forum designations were approved on 17 September 2014 and, as five years has elapsed since it was approved, the Mill Hill Neighbourhood Forum has re-applied to continue to be formally designated beyond 17 September 2019, in accordance with the Town and Country Planning Act (1990) and the Neighbourhood Planning (General) Regulations 2012. At the time of writing this report, the Forum has not published a draft Neighbourhood Plan for public consultation and Barnet Council's response to the Forum's application was pending.

Community Infrastructure Levy

63 Local planning authorities in London are able to introduce Community Infrastructure Levy (CIL) charges which are payable in addition to the Mayor's CIL. Barnet Council's CIL came into effect on 1 May 2013 and is charged at a rate of £135 per sq.m. to residential and retail (A1-A5) uses, with a nil charge on other land uses. Following the adoption of a new charging schedule, MCIL 2 rates now apply to planning permissions granted from 1 April 2019. Accordingly, a rate of £60 per sq.m. would apply to the residential and commercial floorspace proposed. CIL liability would be subject to relief for affordable housing.

Response to consultation

64 All consultation responses received in response to Barnet Council's local consultation process, and any other representations received by Barnet Council and/or the Mayor of London in respect of this application at the time of writing this report, are summarised below, and have been taken into account in this report. The Mayor has been briefed on the amount and content of all consultation responses, including the comments, objections and issues raised.

Initial consultation (January 2018)

65 Barnet Council undertook consultation on the initial application during January 2018 by sending 3,455 letters of notification to neighbouring residents, relevant statutory bodies, neighbouring boroughs and amenity groups as well as issuing site and a press notice. The following statutory and non-statutory consultation responses were submitted to Barnet Council.

Statutory consultee responses to Barnet Council

66 Greater London Authority (including Transport for London): The Mayor's initial consultation Stage 1 consultation response is summarised above (GLA report ref: GLA/3756a/01).

67 Transport for London: commented as part of the Mayor's Stage 1 response, and also provided a separate direct response to Barnet Council, setting out issues in relation to TLRN highways structure, bus impact and mitigation, walking and cycling, healthy streets, car parking and

access, travel planning, servicing and construction management, and Mayoral CIL. Specific issues raised in TfL's initial representation to the borough were as follows:

- TLRN highways structure - safeguards are required via planning obligation or condition to ensure works on site (including piling or tree planting) does not undermine the structural integrity of the TfL highway structure (A1) or reduce TfL's ability to gain access to the highway for inspection, maintenance or repair.
- bus impact – a financial contribution of £475,000 is required to mitigate the impact of the development on the 221 bus route, which has no spare capacity and should be secured by Section 106, together with measures to reduce congestion and delays to buses at nearby junctions.
- cycle parking – welcomed compliance with the standards in the draft London Plan, which should be secured by condition. Further details on the accessibility and layout of long-stay cycle parking spaces is required.
- walking and cycling access - support for recommended improvements to improve the quality of routes.
- car parking – a reduction on car parking spaces and provision of car club bays is encouraged.
- delivery and servicing, construction logistics, construction traffic management and travel plans should be secured.

68 Historic England: Development should be considered in line with national and local policy guidance, and on the basis of the specialist conservation advice of the Council.

69 Historic England (archaeology): No objection. The site does not lie within an Archaeological Priority Area and has a low archaeological potential. As such, the proposal is unlikely to have a significant effect on heritage assets of archaeological interest and therefore no further assessment, mitigation or conditions are considered necessary.

70 Natural England: No objection, standard advice provided.

71 Environment Agency: No objection. Standard conditions relating to contamination land recommended, should contaminated land be identified on site.

72 Highways England: No objection, subject to the following conditions being attached to any planning permission and approved in consultation with Highways England to ensure the safe operation and structural integrity of the M1 motorway:

- construction logistic and traffic management - including the structural design of foundations, including geotechnical and drainage data, the use/operation of cranes, piling and scaffold erection/dismantling; and
- solar glare and glint - the applicant shall demonstrate that the design and materials selected for external surfaces (windows and cladding) will not have an adverse effect on the motorists using the M1 and that mitigation measures have been provided to reduce any potential effects of glint and glare; and
- Materials covering the environmental barriers along the M1.
- reference in any planning permission is made to their ownership and management responsibilities for the M1 footbridge and the former link road connecting the M1 to the A1 southbound (this land has since been purchased by the applicant).

73 Thames Water: No objection, subject to the following two Grampian conditions being attached to any planning permission:

- No commencement of the development until a drainage strategy detailing any on and/or off site drainage works has been submitted and approved by the local planning authority in consultation with the sewerage undertaker. No discharge of foul or surface water from the site shall be accepted into the public system until the drainage works referred to in the strategy have been completed.
- No commencement of the development until an impact study of the existing water supply infrastructure have been submitted to, and approved in writing by, the local planning authority (in consultation with Thames Water). The studies should determine the magnitude of any new additional capacity required in the system and a suitable connection point.

74 Although not a statutory consultee in respect of this application, Sport England: Objected to the development on the following basis:

- Barnet's CIL Regulation 123 list does not include sport facilities and therefore, the sporting demand created from the proposed development would not be addressed through CIL. The development will generate demand for sporting provision which the existing provision within the area may not be able to accommodate, subject to the findings of the Council's needs assessment. Therefore, Sport England considers that the developments should make a contribution towards meeting the demand generated either via on-site facilities and/or providing additional capacity off-site.
- Sport England's Sports Facilities Calculator (SFC) indicates that a population of 1,721 (calculated by multiplying the number of residential units by the figure for an average household, 2.4) in this local authority area will generate a demand for:
 - 0.12 sports halls (£335,807);
 - 0.09 swimming pools (£368,409);
 - 0.09 indoor bowls rinks (£37,765); and
 - 0.06 artificial grass pitches (£60,305 if 3G or £54,500 if sand based).
- Barnet's Playing Pitch Strategy or Indoor Sports Facilities Strategy should be used to identify the implications on the local area and set out the sporting facilities that need improving.
- Sport England would like to object to the application if the requisite financial contributions are not secured.

Individual neighbourhood responses

75 A total of 664 objections and 3 letters of support were received in response to the public consultation undertaken in January 2018 on the original application. The grounds for objection are summarised below and grouped by topic headers used in this report:

Land use principle

- Loss of much needed retail facilities and employment uses which are lacking in the area.
- The application does not comply with the spatial strategy in the Local Plan because the site lies within a suburban location that is outside the Regeneration and Growth areas.
- Insufficient provision of on-site social and community infrastructure use, relative to the number of proposed homes
- The scale and quantum of development would result in unacceptable strain on local infrastructure and services, particularly schools and health centres, which are already over capacity.

- The site should be retained as a retail/leisure park, as this is a more suitable use given its location next to busy roads.

Residential quality

- The site is unsuitable for residential development, as it is hemmed in by the A1 dual carriageway, M1 motorway and Midlands Mainline Railway, which gives rise to environmental concerns in terms of air quality, noise and site access and would compromise the quality of the residential units and poses a risk to the physical and mental health and well-being of future residents.
- The site is unsuitable for families with small children.
- Insufficient outdoor amenity space.
- Flats are too small.

Urban design, tall buildings, heritage and views

- Overdevelopment of the site.
- Excessive height and scale of the development which is incongruous with and would harm the suburban character of the area.
- The development exceeds the building height restrictions set out in the Council's adopted Local Plan and Pentavia Retail Park Site Brief.
- Building heights should be limited to between 3 and 5 storeys/ 6 and 7 storeys.
- Detrimental impact on views from Mill Hill Park, Sunny Hill Park and the Millfield, Arrandene open spaces.
- Harm to Mill Hill Conservation Area and Watling Estate Conservation Area.
- The development will set a precedent of tall buildings in Mill Hill.
- Density of development is excessive on this inaccessible site with low PTAL (1b).
- Poor quality design - bland architecture; lacking in imagination; the development would be an eyesore; blocks are reminiscent of Soviet Blocks built in Eastern Europe.
- Harm to the operation of the nearby UCL Observatory due to light spillage and glare.
- Overshadowing and daylight/sunlight impacts to nearby residential properties.
- Privacy impacts on nearby residential properties.

Housing mix, affordable housing and build to rent units

- Insufficient affordable housing/social housing, which does not comply with the Council's 40% affordable housing target.
- Rent levels for affordable homes would not be genuinely affordable.
- Inadequate provision of family sized (3 bedroom +) units.
- Build to Rent accommodation will result in a transitory population with high turnover of residents on short term tenancies and will not integrate into the local community.
- There is sufficient rented accommodation available in the area.

Parking and highways impact

- The development would fail to provide an adequate number of on-site parking spaces. This will result in overspill parking on local roads, with future residents likely to park on the adjacent streets; parking on pavement on Bunns Lane is already causing highways safety problems.
- Concern that site access on the A1 means that all vehicles will need to move northbound towards Mill Hill Circus Roundabout, which already experience high levels of traffic congestion during peak times, leading to increased traffic congestion, air pollution and highways safety issues.

Public transport infrastructure

- The site is too far from the train station and is not well served by pedestrian routes, cycle paths or public transport to local shops and services.
- The development would result in significant additional strain on local public transport services, trains from Mill Hill Broadway and local buses, which are already over capacity during peak periods.

Walking and cycling

- Inadequate pedestrian and cycle access to the site and failure to improve access for cyclists to Bunns Lane.
- Development would be inaccessible to the disabled, less mobile and families with small children

Drainage and flood risk

- Development will increase the risk of surface water flooding, particularly on Bunns Lane Bridge, which already experiences drainage issues during periods of heavy rainfall.

Biodiversity

- Natural woodland habitats between the site and Palmerstone Court must be retained

Community safety

- Crime will increase in the area as a result of the development.
- The site is isolated, so will inevitably become a ghetto and recipe for crime.

Other responses to the Council, including residents' groups and elected members

76 An objection was also received from Matthew Offord, the Member of Parliament for Hendon, which can be summarised as follows:

- The proposals constitute overdevelopment, are not visually attractive and will have a detrimental impact on the surrounding area. The application is contrary to the NPPF, Barnet Local Plan and the Residential Design SPD;
- The application site is in an isolated location and thus the development would have inadequate levels of access;
- The development would result in a significant population increase without providing sufficient facilities and services which are already strained;
- The development makes inadequate parking provision in a location which is inaccessible and has a poor PTAL rating;
- The inadequate levels of on-site parking would result in overspill parking on surrounding roads;
- The development does not represent a sustainable form of development; and
- The excessive density would put unreasonable pressure on services, would be detrimental to the character of Mill Hill and would not provide the quality of life which might reasonably be expected in an outer London, suburban location.

77 An objection was received from Andrew Dismore, Assembly Member for Barnet and Camden, which can be summarised as follows:

Land use and housing policies

- The proposal does not comply with the draft planning brief produced by the Council, which rightly advocated a more mixed use development, and not such an intensification of the site;
- Loss of A1/A3 retail/restaurant units will lead to a reduction in local amenities in an area which already suffers from a lack of amenity and retail and in which there are substantial developments proposed which include little or no retail. This will lead to traffic and congestion elsewhere, or leave new developments are dormitories, fit only as assets for overseas owners;
- The proposed affordable housing is inadequate, with proposed rent levels set at a level higher than the existing average market rent for the area, which is already unaffordable to many. This will have the effect of increasing private sector market rents locally.
- Build to Rent only development is not appropriate in an area where the demand is for family sized homes and mixed communities.
- The proposed scale and design of the scheme is out of keeping with the area and represents an overdevelopment of the site. 15 storeys is too high and creates an overbearing and enclosed design.
- The development is not in conformity with the adopted site brief which advocated a mixed use medium density development of 3-5 storeys;

Local Infrastructure

- Alongside other nearby development, the scheme will lead to a large increase in the local population, without any accompanying improvement in local public services. Concern that children living in the proposed development would have to travel far to access schools, given shortage of places in existing schools. The same applies for primary health care services.

Transport and parking

- Local public transport provision is poor at this site, which is sandwiched between the M1 and A1. Pedestrian crossings and access is constrained. Car usage will be high and parking provision will be insufficient to deal with the expected need. This will cause overflow parking on nearby streets, and will impact on already heavily congested roads, such as Bunns Lane and Woodcroft Avenue.

Environment

- The polluted environment between the M1 and A1 will leave the development with very poor air quality. Air quality in the scheme is so bad that the scheme design has inward facing balconies, creating an oppressive and overbearing aspect. Any outward facing windows will not be safely openable due to pollution.
- There is a lack of open space for older youths' recreation. A children's playground is not suitable for teenagers, and as pedestrian access outside the site is so poor, there is nowhere for them to go.
- There is a significant risk of light pollution, which will impact on the nearby scientifically important and long standing UCL Observatory.
- This scheme constitutes a significant overdevelopment and unwelcome change of use of the site, with consequent loss of amenity for the community. The design is unacceptable and the flats are not affordable. The local infrastructure is inadequate to cope with another significant increase in the local population. There is little public transport at this site, which, due to the

difficult access, will result in more residents owning cars, than there are parking spaces to accommodate. The air quality is so poor, that any flat would be almost uninhabitable.

78 An objection was received from Councillor Val Dushinsky of the Mill Hill Ward, which can be summarised as follows:

- the height, scale and massing is totally out of keeping in Mill Hill; the density is excessive as the site has poor public transport connections and access and egress to this site is only via the A41; the proposal is contrary to the Local Plan and adopted site brief; visual impact on the Mill Hill Conservation Area and Watling Estate Conservation Area has been ignored.

79 Mill Hill Neighbourhood Forum: Objected to the application on the following grounds:

- Gross overdevelopment of the area.
- The application does not comply with local planning policies as the site is outside of the Collindale regeneration/development area and is within an area in which the Local Plan seeks to enhance and protect in terms of its historic and suburban character.
- The application does not comply with the building height restrictions set out in the Councils Local Plan and adopted Planning Brief, which state that the site is not appropriate for tall buildings (8 storeys and more in height).
- The application would negatively impact local views.
- The proposals do not accord with Policy 7.7 of the London Plan on Tall Buildings given its location and adverse impact.
- Building heights should be limited to 3 to 5 storeys.
- Local infrastructure cannot cope with additional residents; public transport, local highways, local school and health infrastructure are over capacity.
- Air quality and noise pollution levels caused by the site's close proximity to the M1 and A1 and canyon effect caused by proposed buildings.
- Light pollution and the impacts on the UCL observatory.
- Socio-economic issues associated with the effects of living in tall buildings.
- Insufficient levels of on-site car parking provision, which will lead to overspill parking on adjacent roads, congestion and require parking controls to be implemented.
- The proposed 35% affordable housing will not be truly affordable and is set at levels above the existing average market rent for area.
- The density is too high in view of the site's low PTAL suburban location
- Loss of retail/restaurant uses reduces local amenities available in the local area, which are lacking.
- Overbearing and enclosed design.

80 Mill Hill Preservation Society: Objected to the application on the following grounds:

- Scale, bulk and massing is excessive and breaches the Barnet Plan, the London Plan and the Planning Brief for site and would have an extremely overbearing visual impact, given the height exist of surrounding buildings.
- Detrimental impact on views from The Mill Field and the Mill Hill Conservation Area, which is described in the Local Plan as an "important" view that should be protected. It will also

adversely affect the views from Mill Hill Park and Sunny Hill Park. Furthermore, the proposed development will loom large over nearby residential roads such as Bunns Lane and the Watling Estate Conservation Area. The proposed development therefore clearly breaches the instruction to protect views laid down in the Barnet Plan, the London Plan and in the Planning Brief.

- Overshadowing of both the surrounding areas and within the development itself, for example the central courtyard.
- Density is too high. The application describes the site as “urban”, but this is a suburban location.
- Flats are very small with little storage space.
- Noise and air quality - The development is sandwiched between the M1 and the A1/A41 and the main railway line and hence is subject to high levels of noise pollution and air pollution. Despite “acoustic protection”, the reality is that in warm weather these small flats will get stuffy and people will want to open their windows. The air pollution maps for London show the A1/A41 from Mill Hill to Apex Corner as one of the most polluted parts of London.
- Infrastructure capacity - schools, GP surgeries and public transport provision are all struggling to cope and no increase proposed to accommodate the additional population.
- Mill Hill has traditionally been a settled family neighbourhood and a large Build to Rent development would accommodate a transient population which would fail to integrate.
- The Planning Brief for the site is clear that should be mixed use with retail and employment opportunities, which are needed in the local area
- Public transport access - Local public transport is very poor as demonstrated by the site’s 1b PTAL rating.
- Parking - 540 parking spaces for 717 units is clearly insufficient and will cause overspill parking in local roads.
- Traffic congestion - The scale of this development coupled with poor public transport will have a significant impact on traffic levels on both local roads and on the A1/A41 on which all traffic from the development will have to travel. The roundabout at Mill Hill Circus is already subject to serious congestion.
- Light pollution - The size of this development and the consequent light pollution generated will have an adverse impact on the University of London Observatory situated less than 500 metres away.

81 Barnet Cycling Campaign (BCC): objected to the application on the following grounds:

- Welcomed the inclusion of significant numbers of cycle parking spaces.
- Lack of cycle access to the site and failure of the scheme to address this or fulfil the explicit objective of the Council’s Planning Brief (to improve cycling links) and failure to support the wider aims of the Local Plan and London Plan in relation to cycling.
- Lack direct cycle access from the site to Bunns Lane as the proposed Bunns Lane access would be pedestrian only.
- Concerns about the Cycle Level of Service (CLoS) assessment and scores, which was undertaken without meaningful involvement of stakeholders such as the BCC.

- Recommendations in the CloS do not go far enough, or are unsuitable for cyclists – for example, reliance on ramps which require cyclists to dismount as these are unusable for disabled cyclists;
- Lack of proposed improvements to the wider surrounding cycle network in the area, including measures to remedy issues BCC identify on the following routes in relation to cycle provision, safety, comfort and maintenance: Bunn's Lane, the A1 (northbound and southbound), the A1 subway, M1 footbridge and railway underpass.
- Concerns with the adequacy of the Transport Assessment and lack of compliance with the Mayor's Transport Strategy (2018) and 10 healthy streets criteria.
- The scheme therefore represents a wasted opportunity to improve walking and cycling in the area and encourage modal shift.

82 Brent Cyclists (the Brent group of the London Cycling Campaign) objected to the application for the following reasons:

- unsatisfactory cycle access proposed which is inconsistent with the Mayor's Transport Strategy.
- Failure to create 'new pedestrian and cycle links that contribute to the integration of the site with Colindale and Mill Hill', as required by the Planning Brief for the site. Critical to doing this would be creation of a good-quality cycle link to Bunn's Lane, usable by all types of cycles and all cyclists without dismounting, plus improvements to the very poor cycling environment of Bunn's Lane.
- Existing cycle links to the site on the east side of A1 and via the M1 footbridge and A1 underpass would remain very poor and uninviting, with steep indirect ramps and an intimidating tunnel with blind bends, none of which were ever designed with cycling in mind.
- We would expect a residential development here to be used as an opportunity to fix these long-standing problems, but current plans fail to do this, hence our objection.

83 University College London: Objected to the application on the following grounds:

- The site is 500 metres south of the UCL Observatory operated by UCL's Department of Physics and Astronomy since 1929, which is highly sensitive to light pollution.
- Lighting from the windows of the apartments will result in considerable amounts of light pollution and scattered light. Building elevations facing the M1 and A1 will also be a source of reflection for car light further contributing to additional night-time light pollution and glare. The development will have a detrimental impact on the operations of the observatory.
- The Pentavia Retail Park is in direct line of sight of the Observatory and light pollution from the site would have a significant impact on the facility's ability to observe southern hemisphere objects in the sky, which are only available for short period of the year during the winter.
- Mitigation measures are insufficient to prevent detrimental impact on the UCL Observatory. Tree lines between the site and the observatory are mostly leafless during the winter months, when the Observatory is mostly in operation due to longer hours of dark.
- Scattered light has not been modelled and this is a substantial source of light pollution.

LB Barnet Council Internal consultees:

84 Barnet Council's Environmental Health team provided a consultation response on the application which can be summarised as follows:

- In terms of air quality, windows on the external facades where air quality exceed the UK air quality objectives will need to be kept closed to ensure internal air quality does not exceed the UK Air Quality Objectives. Air will need to be drawn in from the internal facades through openable windows. The ventilation and extraction system needs to have suitable purge ventilation ability should these external windows be sealed shut. A condition to require windows to be sealed shut where air quality exceed the UK air quality objectives is strongly recommended. As air quality should improve with height, it might not be necessary to keep windows closed on the higher storeys of the development.
- The air quality neutral assessment shows that transport emissions will be above the benchmark with the development. Therefore, offsetting will be required. A scheme for air pollution mitigation measures to offset the increase emissions from transport calculated in the air quality neutral report should be submitted to and approved by the local planning authority prior to the development.
- In terms of noise, the form of mitigation measures proposed are sufficient. However, when windows on external facades are opened, then internal noise levels will be higher than those in the Council's SPD. Therefore, these can be kept shut, with adequate ventilation provided via Mechanical Ventilation Heat Recovery Units. Purge ventilation needs to be sufficient. Tying in with the air quality mitigation, it is recommended that windows on the affected facades are sealed shut.

85 Barnet Council's drainage consultants submitted a consultation response which can be summarised as follows:

- The applicant should provide justification / further information on why more preferred SuDs techniques (eg open SuDs and green roofs) have not been proposed.
- Calculations for the current run-off volume from the development site and the proposed post-development run-off volumes should be provided.

Amended scheme re-consultation (June 2018)

86 On 5 June 2108, the applicant submitted amended plans and document which are summarised in paragraph 41. A full re-consultation was carried out by Barnet Council on these proposed revisions with 3,455 letters being sent out to neighbouring properties. As a result of the re-consultation and additional 79 representations were received objecting to the application, including further representations were also made by local ward councillors, the Mill Hill Preservation Society, the Mill Hill Neighbourhood Forum reinforcing their previously stated objections to the scheme. There were no substantially new issues raised within the additional objections received that were not raised within the initial consultation exercise.

87 A representation was received from Mill Hill Residents Association who objected to the application on the following grounds:

- Height of the proposed tall buildings is not justified as the site is outside the Council's major growth areas, would not provide any landmark function and the site has a low PTAL
- Overshadowing of surrounding properties
- Impacts on important views from Mill Fields towards Harrow on the Hill - the proposed buildings would clash with or overshadow the domed roof of the University of London Observatory that is prominent in the foreground of this view and will break the horizon line thus lessening the prominence of the arch of Wembley Stadium in the distance.

- Visual impact on the Mill Hill and Watling Estate Conservation Areas as the Pentavia site is highly visible from both these ‘low rise landscape’ areas.
- Density is too high and would not accord with the London Plan density matrix or Barnet Council’s Three Strand Approach in the Local Plan.
- Parking provision would be inadequate for the site with a low PTAL and will result in overspill parking
- Air and noise pollution
- Insufficient infrastructure – in terms of the capacity of train, bus and health services and schools.

Representations made to the Mayor of London (prior to Stage 2)

88 Prior to Barnet Council formally referring the application back to the Mayor on 24 October 2018, the Mayor directly received 6 letters of objection to the scheme, including: two letters from Andrew Dismore, Assembly Member for Barnet and Camden; letters from the Mill Hill Neighbourhood Forum, the Mill Hill Preservation Society; the Mill Hill Residents Association; the Barnet Cycling Campaign; and a letter from a local resident. These representation reiterated the range of objections set out to Barnet Council and are summarised above.

89 Following the Mayor’s decision on 5 November 2018 to take over the determination of the application from Barnet Council by issuing a direction under Article 7 of the 2008 Order, a total of 187 representations were received objecting to the application, including a letter of objection received from Matthew Offord MP, Mill Hill Preservation Society and the Barnet Cycling Campaign. These representations reiterated the range of objections set out to Barnet Council which are summarised above and, where new objections were raised in these representations, these are included within the summary provided below.

Re-consultation exercise (March-May 2019)

90 On 25 March 2019, the applicant submitted revisions to the application which are summarised above in paragraph 40. These amendments were subject to a re-consultation exercise which was undertaken between 27 March 2019 and 6 May 2019 (40 days in total). A total of 3,500 letters of notification and 161 emails of notification were distributed to the occupants of neighbouring properties and those who had previously commented on the application thus far. Site notices were also erected on both sides of Bunns Lane and the A1 and a press notice was published on 28 March. The applicant also held public exhibitions to explain the amendments on 9 March at the RAF Museum and 12 March at Hartley Hall.

91 All the representations received in respect of this application have been made available to the Mayor in printed form; however, in the interests of conciseness, and for ease of reference, the issues raised have been summarised in this report as detailed above.

92 Responses: A total of 133 responses were received by the Mayor and/or the GLA during the consultation period, of which 131 responses objected to the application and 2 respondents raised no objection. When combined with the responses received by the Mayor/GLA following the Mayor’s decision to take over the determination of the application on 5 November 2018, a total of 293 representations have been received, of which 291 responses objected to the application and two responses raised no objection. These responses have been made available to the Mayor and have been taken into account in this report.

Summary

93 In summary, the issues raised in objection to the revised scheme can be broadly categorised as follows:

- over-development of the site
- excessive height, scale, massing and density
- visual impact on nearby conservation areas, local views and the character of the local area
- the application conflicts with the building height restrictions in Barnet's Local Plan and Planning Brief for the site
- the application could set a precedent for tall buildings in the area
- the site is not suitable for residential accommodation because of noise, air quality and site access constraints
- the proposed noise/air quality mitigation strategy are not appropriate/realistic/acceptable
 - sealed windows and mechanical ventilation of units is not a practical, tenable or viable option for residents and will lead to overheating issues
 - what happens if air conditioning breaks down during summer?
 - the ventilation system should have filters to extract pollutants
 - air pollution levels will breach legal limits in outdoor amenity spaces, which will be unusable
 - the development will worsen local air quality for residential homes and the nursery and primary school located close to the site
- loss of retail floorspace/lack of retail uses proposed
- the site should be predominantly used for commercial/leisure/employment uses
- pedestrian and cycle access and safety and accessibility concerns
- public transport capacity and access
- social infrastructure capacity (particularly health and education infrastructure) and lack of mitigation proposed
- internal daylight and sunlight conditions within proposed residential units
- overshadowing and loss of light to neighbouring properties
- light pollution affecting nearby properties on Bunns Lane and the UCL Observatory
- car parking provision is inadequate and would lead to over-spill parking on adjacent roads
- the assumption that residents will all cycle, walk and use public transport is unrealistic given the site location, PTAL and access constraints
- use of the existing vehicle access on the A1 would give rise to highways safety issues and additional congestion at Mill Hill Circus
- poor quality design and architectural appearance
- lack of open amenity space
- enclosed and inward looking nature of the scheme would create a poor quality residential environment
- the development would be a segregated ghetto
- the site would be unsuitable for families with children or people with mobility issues due to steep access routes and proximity to major roads
- increased affordable housing is welcomed
- housing would not be affordable to local people
- additional rented accommodation is not needed in the area
- a more transient rental population will fail to integrate with the local community
- flats will be sold for investment purposes and seldom occupied
- construction impacts in relation to dust, noise, traffic congestion and highways safety
- localised surface water drainage issues on Bunns Lane would be worsened

94 Natural England: No objection, citing previous advice.

95 Highways England: No objection, subject to their recommended draft conditions being attached to any planning permission, summarised above. Highways England's consultation response confirmed that a condition referring to their ownership of the M1-A1 southbound link road is no longer required as this land has been purchased from Highways England by the applicant. Highways England also recommended that an informative is included in any planning permissions in relation to the proposed improvement scheme for the M1 footbridge, to confirm that this infrastructure asset is owned and managed by Highways England, so any works would need to be agreed and delivered via a Section 278 Agreement.

96 National Grid (Cadent Gas Ltd): No objection

97 An objection was received from Barnet Cycling Campaign, which maintained their original objection to the application and made the following specific comments on the proposed cycle access improvements:

- Barnet Cycling Campaign welcome the additional changes to provide cycle access to Bunns Lane and the A1 and proposed improvements to the railway tunnel by Grahame Park Way.
- The proposed cycle route to Bunns Lane is too narrow and should be at least 2.5 metres wide if shared; preferably 3m and segregated.
- Shared paths can be problematic and there is no evidence of an assessment of this potential conflict.
- Lack of cycle segregation along the western access road which provides access to the underground car park and cycle parking facilities and concerns about gradients and step free access, which is unclear from the submitted plans.
- No changes to the surrounding infrastructure have been proposed and consequently most of our original points still stand.
- BCC welcome acknowledgement of the new Mayor's Transport Strategy but note that there is no evidence of checks against the 10 Healthy Streets Criteria and recommend this is re-evaluated.
- There should be improved crossings on Bunns Lane to the east of the proposed new access point to serve cyclists using the preferred cycle route to Mill Hill via Flower Lane. This should preferably be a Toucan crossing, serving pedestrians and cyclists.
- Cycle access now proposed along the A1 would still be problematic for those heading south who would need to cross the vehicle access to the site on the A1

98 UCL Observatory: Objected to the proposals due to the proximity and sensitivity of the UCL observatory to the site and the detrimental impact the proposal would have in terms of light pollution, scattered light and night time glare. Having reviewed the revised application, UCL are concerned that the applicant's updated Visibility and Light Pollution Study now states that there would be a negligible reduction in their view of the sky from UCL observatory, whereas the previous assessment had concluded that the UCL observatory's view of the sky would not be reduced.

99 Sport England: Maintained their objection to the application on the same basis as their original representation and provided an updated assessment of the demand for sports facilities generated, taking into account the increased density and population of the scheme. Sport England's Sports Facilities Calculator (SFC) indicates that a population of 2,727 in this local authority area will generate a demand for:

- 0.20 sports halls (£565,169);

- 0.14 swimming pools (£610,528);
- 0.15 indoor bowls rinks (£63,756); and
- 0.09 artificial grass pitches (£100,633 if 3G or £90,726 if sand based).

100 Mill Hill Neighbourhood Forum: Maintained their objection to the application summarised above and made the following additional comments:

- the revised scheme has simply exacerbated the issues we have raised and done nothing to mitigate our objections.
- the applicant has continued to ignore Planning Brief and issues raised during public consultation on various iterations of the application.
- support the Mayor's role in ensuring the developer increases the percentage of affordable housing but reiterated their view that the development would be totally out of place in Mill Hill, a suburban town and village which has poor public transport and is car dependent in terms of local journeys
- if the development is allowed to proceed with such a severe limitation in on-site parking, a CPZ will need to be introduced in the surrounding areas. A legal agreement will be required to restrict future occupiers of Pentavia from obtaining street parking permits in any CPZ, as there is insufficient parking capacity on-street for existing residents and business owners.
- Concerns that the development will impact the evolution of Mill Hill Forum's Neighbourhood Plan and their proposals to submit draft Neighbourhood Development Plan to Barnet Council.
- The designs offer no real architectural merit and could be a prison or office block almost anywhere. Concerns that site like this are building ghettos of tomorrow.
- While their impact on the environment within the site is in some ways mitigated, their environmental impact on surrounding properties has not apparently been assessed.

101 Mill Hill Preservation Society: Maintained their objection to the application summarised above and made the following additional specific comments:

- The proposed development does not represent the principles of Good Growth which requires sensitivity to local context.
- Rent levels in affordable homes would not be affordable – up to £1,200 a month.
- The application does not comply with the criteria for assessing tall buildings in London Plan Policy 7.7.
- CGIs show that the application would have considerable impact on the following local streets: Flower Lane, Hammers Lane, Bunns Lane, Parkside, Grahame Park Way, Field Mead, Dunn Mead and, Long Mead, as well as Woodcroff Park, Mill Hill Park, Mill Hill Park Extension and Arrandene open space.
- Development will be visible from the Rideway and Mill Hill Field above the tree line and would harm this important local view and also affect views of Wembley Stadium.
- Impacts on Mill Hill Conservation Area and Watling Estate Conservation Area.
- Visual impact on Mill Hill Cemetery.
- Harm to the Grade II listed Mill Hill School building.
- Air quality:

- Building homes in a location where you are unable to open the windows because of surrounding poor air quality does not make sense.
 - Flats which need mechanical ventilation do not meet the necessary standards for sustainable development.
 - The applicant's Air Quality Assessment under predicts current air quality levels and future air quality conditions for the proposed development
 - The development would have a detrimental impact on the air quality levels of surrounding residential homes
 - The applicant's assessment does not take into account air quality impacts on the Bright Little Stars nursery on Bunns Lane, which should have been considered as a sensitive receptor
 - The application would be contrary to London Plan Policy 7.14 by leading to a further deterioration in existing air quality which will affect vulnerable people (children)
 - Benchmark Transport Emissions
- There is sufficient rented accommodation available in Mill Hill.
 - Viability – the applicant is seeking to sell the site, rather than develop it, and the revised application seeks overdevelopment of the site to make it attractive for sale.
 - Parking – this is still an issue and parking ownership will be higher than is suggested.
 - Cycling – A lot of weight is being given to cycling, but access to the site is limited for cycling and the adjacent roads mean cycling would not be a practical or safe option for residents.
 - Health facility – no discussions about what health facilities would be located on site.

102 Mill Hill Residents Association: Maintained their objection to the application and made the following additional points on the revised application:

- Design, townscape and visual impact - Despite design revisions, the application continues to break with Mill Hill's urban grain, overshadow surrounding properties and impact one of Barnet's key views - Mill Fields towards Harrow on the Hill as well as Mill Hill and Watling Estate Conservation Areas which are 'low rise landscape' areas.
- Parking - the reduction of residential parking spaces from 545 to 366 which equates to 0.43 spaces per flat is grossly inadequate for this suburban location with a current PTAL rating of 1b and forecast PTAL rating of 2.
- Whilst we acknowledge the need to utilise alternative modes of transport for the sake the environment and our health, but changing people's behaviour does not happen overnight.
- If the development is proven to have a detrimental impact on the parking situation along Bunns Lane, Flower Lane and associated side streets, the cost of any subsequent need for a CPZ should be borne by the developer and CPZ restrictions placed on residents within the site to prevent future occupants from obtaining a permit. Annual renewals and visitor permits should be unfairly levied on local residents, so should be provided at the cost of the developer.
- The proposals will not produce the level of cycling and walking required and will result in increased motor car use and risk to lives of those who want to cycle and walk.
- Air quality and noise - query whether or not MVHR inlets addresses interior pollution in relation to cleaning products, as typically you would open windows when using strong cleaning products.

- Traffic congestion - welcome support toward enhancements of the double roundabout at the Bunns Lane and Page Street junction but raise concerns about the impacts of the scheme on Mill Hill Circus given the decision to not progress any changes to this roundabout.

103 Mill Hill Preservation Society: responded to the re-consultation stating that the proposed changes do not address previous concerns which still stand and consequently maintain their objections on the following grounds and made the following comments:

- The height and bulk of the development would have a detrimental impact on the local context, character and appearance of the area, including nearby conservation areas and local views, which would be exacerbated by the fact that the site is on land that is considerably higher than the adjacent land at Bunns Lane and Grahame Park Way.
- The density exceeds the density matrix and should be achieved without tall buildings.
- Concerns about air quality for future residents and the impact of the development on the air pollution experienced by the adjacent residential properties and nursery.
- Sealing windows shut does not accord with sustainable development principles.
- A lower density/ height approach would better address environmental site constraints.
- Further reduction in parking is an issue given the site is not well-served by public transport, which could result in overflow issues and parking stress. The site would have limited appeal for cyclists due to major roads – not practical a safe or practical solution to access constraints.
- Affordable housing would be in an inaccessible location.
- Concern there should be provision within the site for a health facility.
- Concern that applicant just wants to sell the site rather than build it.
- Overall, the proposed development would not comply with Local and London Plan policies or accord with Good Growth / sustainable development principles.

104 Barnet Council: Whilst no formal response was received from Barnet Council on the revised application, the application was taken back to Planning Committee on 8 April 2019, with the following recommendations, which Barnet Council's Planning Committee resolved to unanimously endorse:

- Given the revised application retains the height of the 15 storey tallest element (Block A) and also introduces additional height to Blocks B, C, D, F, G, H, I, J, K, L, M, N, O, P, Q and R, officers recommend that the Council maintains the objection to the scheme on the grounds of excessive height, scale and massing as set out in the first reason for refusal.
- The amended application has fundamentally revised the housing offer which would increase the on-site affordable housing provision to 41%, which is compliant with Barnet's Local Plan policies. Officers would therefore strongly recommend that the Council withdraws any objection to the scheme based on affordable housing.
- The reduction in the levels of residential parking to a ratio of 0.43/0.47 spaces per unit is considered to constitute an unacceptably low level of residential parking. In light of this reduced level of parking, in view of the site's poor level of accessibility with a PTAL of 1. Officers consider that it would be appropriate for the Council to make representations to the Mayor objecting to the revised application on this basis.

105 That the Council's updated reasons for refusal in relation to the revised application are as follows:

1. The proposed development, by virtue of its excessive height and scale would represent an over development of the site resulting in a discordant and visually obtrusive form of development that would fail to respect its local context and the pattern of development within the surrounding area, to such an extent that it would be detrimental to the character and appearance of the area. The proposal would therefore be contrary to policies CS NPPF, CS5, DM01 and DM05 of the Barnet Local Plan Core Strategy and Development Management Policies (September 2012), policies 3.4, 7.4, 7.6 and 7.7 of the London Plan (July 2011, October 2013 and January 2014) and the Pentavia Retail Park Planning Brief.
2. The proposed development would provide inadequate levels of residential parking provision to serve the development, resulting in likelihood of additional parking stress within the surrounding area parking to the detriment of highway and pedestrian safety and the freeflow of traffic, contrary to Policies CS9 and CS15 of the Local Plan Core Strategy (adopted September 2012), and Policy DM17 of the Local Plan Development Management Policies DPD (adopted September 2012).

Re-consultation exercise (June to July 2019)

106 A further re-consultation exercise was undertaken by the GLA following the submission of revised plans, drawings and documents, which ran from 1 June to 3 July (33 days). The changes consulted upon proposed alterations to the internal layout of residential units and communal core accesses and amendments to the provision and configuration of private amenity spaces in the form of balconies, winter gardens and landscaped terraced. Further information was also submitted by the applicant in relation to phasing, the proposed housing tenure by block, transport, internal daylighting, solar glare, overheating, and the revised energy strategy. No changes were proposed in relation to the height, footprint or massing of the proposed buildings or in relation to the total number of homes proposed or parking provision. This public consultation was undertaken in accordance with the previous consultation exercises, with letters and email notifications sent to those who had previously commented on the application and surrounding residents and site notices and a press notice issued.

107 In total, 55 responses were received, of which 54 objected to the proposals and one response raised no objection to the application. No substantively new comments were raised as part of this public consultation. Responses were received from both the Mill Hill Preservation Society, Mill Hill Neighbourhood Forum, Mill Hill Residents Association which outlined previous concerns raised, as well as commenting specifically on their concerns in relation to parking provision, the potential for the development to give rise to overspill parking and the applicant's assessment of current levels of parking stress in the area. Barnet Cycling Campaign responded to the additional information provided in relation to cycle access and retained their overall objection to the scheme given the lack of improvements to off-site cycle routes and infrastructure.

Online petition

108 An online petition entitled: 'Say no to the excessive overdevelopment of Pentavia Retail Park and to the Mayor!' has been signed by a total of 903 participants (as of 17 July 2019) and can be viewed via the following location:

<https://www.change.org/p/sadiq-khan-objection-to-the-redevelopment-of-pentavia-retail-park>

Representations summary

109 All the representations received in respect of this application have been made available to the Mayor however; in the interests of conciseness, and for ease of reference, the issues raised have

been summarised in this report as detailed above. The key issues raised by the consultation responses, and the various other representations received, are addressed under the relevant topic headers within this report, and, where appropriate, through the proposed planning conditions, planning obligations and/or informatives outlined in the recommendation section of this report.

Environmental Impact Assessment

110 Planning applications for development that are covered by the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 are termed “EIA applications”. The requirement for an EIA is based on the likelihood of environmental effects arising from the development. The proposed development is considered to comprise Schedule 2 development likely to have significant effects on the environment by virtue of factors such as nature, size or location. Consequently, the application is considered to form an application for EIA and it has been necessary that an Environmental Statement (ES) be prepared in accordance with EIA Regulations.

111 Prior to the submission of the previously withdrawn application (LPA Ref:16/640/FUL; GLA Ref: D&P/3756), the applicant submitted an EIA Scoping Report to Barnet Council on April 2016 outlining the proposed scope of the ES. Following consultation with the relevant consultation bodies, Barnet Council issued a Scoping Opinion on in July 2016. This confirmed that the scheme constituted EIA development and set out advice and instructions in relation to the methodology and scope of the assessment, including the topics that should be assessed during the EIA process, as well as, those topics which could be ‘scoped out’ of the EIA, because the development was considered to either have no influence on these environmental aspects, or is unlikely to give rise to significant effects. The initial scope of the ES supporting the withdrawn application is summarised in the table below:

Table 2 – EIA Scope, July 2016

Matters scoped in	Matters scoped out
<ul style="list-style-type: none"> • Demolition and Construction • Socio-Economics • Transport and Access • Townscape and Visual Assessment • Air Quality • Noise and Vibration • Water Resources and Flood Risk • Ground Conditions and Contamination • Wind Microclimate • Daylight, Sunlight and Overshadowing, Solar Glare and Light Pollution • Effect Interactions • Mitigation Measures and Significant Residual Effects 	<ul style="list-style-type: none"> • Archaeology • Built Heritage • Ecology • Waste

112 As part of the consideration of the previously withdrawn application, all of the topics outlined above were fully assessed and the likelihood of significant impacts identified. Accordingly, a revised scoping opinion was adopted for the current application with a reduced number of topics in view of the findings of the previous assessment. The topics covered within the Environmental Statement submitted with the current application comprise of the following:

Table 3 – EIA Scope, December 2017

Matters scoped in	Matters scoped out
<ul style="list-style-type: none"> • Demolition and Construction • Socio-Economics • Traffic and Transportation • Townscape and Visual Impact Assessment • Air Quality • Noise and Vibration • Wind and Microclimate • Effect Interactions • Mitigation Measures and Significant Residual Effects 	<ul style="list-style-type: none"> • Archaeology • Built Heritage • Ecology • Waste • Water Resources and Flood Risk • Ground Conditions and Contamination • Daylight, Sunlight, Overshadowing, Solar Glare and Light Pollution

113 Following the decision by the Mayor of London to call in the application for his determination and the subsequent amendments made to the application, an informal scoping note was submitted to the GLA on 12th February 2019 and no changes were made to the scope of the ES supporting the revised application, which remained those listed above. The submitted updated ES (2019) identifies the likely significant effects that the development may have on the environment both during construction and once it is complete and outlines how these effects can be avoided or reduced. The impacts of the planning application are assessed individually and cumulatively with other consented applications in the vicinity of the application site. Under the various subject headings, this report refers to the content and analyses contained within the ES and comments upon its findings and conclusions.

114 Alongside the revisions to the application which were submitted to the GLA on 17 May 2019, the applicant submitted an EIA further information note which confirmed that the revisions do not cause any additional impacts that were not previously assessed as part of the previously updated ES (2019), and on this basis, further revision to the ES is not therefore necessary. GLA officers consider the scope and content of the applicant’s ES to be acceptable.

Principal Planning Issues

115 Having regard to the site and the details of the proposed development, relevant planning policy at the local, regional and national levels; and, the consultation responses and representations received, the principal planning issues raised by the application that the Mayor must consider are:

- Land use principles (including mixed use development, employment, and residential uses);
- Housing (including delivery of affordable housing, tenure, mix, density, quality);
- Design (including urban design, public realm, play space, views);
- Heritage (Including the setting of World Heritage Sites, listed buildings and conservation areas and archeology);
- Inclusive design;
- Residential amenity (including daylight and sunlight, overshadowing, privacy/overlooking; noise/disturbance);
- Sustainable development (including climate change mitigation and adaption, microclimate, ecology, trees and urban greening, flood risk and sustainable urban drainage);
- Other environmental issues (including noise, air quality and waste management);

- Transport, including parking provision;
- Socio-economic issues; and
- Mitigating the impact of development through planning obligations and conditions.

116 These issues are considered within the following sections of the report.

Land use principles

117 The site is not allocated for housing and lies outside the designated regeneration and development areas identified in Barnet Council's Local Plan (Brent Cross – Cricklewood; Colindale; and Mill Hill East). However, the site is the subject of a Planning Brief (adopted in December 2016) which states that residential use as part of a mixed use development is appropriate, subject to suitable site access being provided and noise and air quality constraints appropriately mitigated and controlled. These issues are covered in detail within the relevant section of this report.

118 In relation to non-residential land uses, the Planning Brief states that residential development should be supported by community and retail uses needed to support the development, which should be ancillary to the residential elements of a mixed use scheme. The Planning Brief also states that flexible business uses as part of a mixed use scheme would be appropriate and provide for a range of unit sizes and tenures to meet a variety of business needs. The Planning Brief defines an indicative employment zone which covers a broad area of land to the south of the existing restaurant building including the roundabout, A1 slip road and the adjacent Petrol Station, with an indicative community zone and central amenity space also identified.

119 In view of the existing and proposed use, the following adopted and draft development plan policies are relevant to the principle of the development:

- *Housing* – London Plan Policy 3.3, draft London Plan Policy H1; Barnet Council Local Plan Policies CS3, CS4.
- *Retail and town centre uses* – London Plan Policy 2.15, 4.7; draft London Plan Policies SD6, SD7, SD8; Barnet Local Plan Policy DM11.
- *Community uses* – London Plan Policy 3.16, 3.17, 3.18; draft London Plan Policies H1, SD6 – SD8, S1, S2, S3; Barnet Local Plan DM13.

Housing

120 The NPPF sets out the Government's priority to deliver a sufficient supply of new homes to meet housing requirements and states that planning policies and decisions should seek to make effective use of land and support the redevelopment of under-utilised land and buildings. In line with paragraph 118 of the NPPF, substantial weight should be given to the value of developing brownfield land in meeting housing need.

121 London Plan Policy 3.3 seeks to increase the supply of housing in the capital and sets Barnet Council a 10 year housing target of 23,489 net additional homes between 2015 and 2025. This equates to an annualised monitoring target of 2,394 homes per year. The draft London Plan significantly increases Barnet Council's housing target to 31,340 homes for the period 2019/20 to 2028/29, which represents an annualised average of 3,134 homes a year.

122 To meet housing targets, London Plan Policy 3.3 emphasises the particular importance of mixed use redevelopment of surplus commercial capacity. Similarly, Policy H1 requires boroughs to optimise housing delivery on all suitable and available brownfield sites and specifically encourages the residential-led mixed use redevelopment of low density retail parks and car parks. The need for

existing out of town retail parks to deliver housing intensification and make a full contribution towards meeting London’s housing need is also set out in Policy SD8 and paragraph 2.8.3 of the draft London Plan. This carries forward the Mayor’s overarching objective to meet London’s housing need by making the best use of potential capacity on brownfield land within the capital, whilst safeguarding the Green Belt and other designated open spaces, as set out in London Plan Policy 1.1 and Policy GG2 of the draft London Plan.

123 During public consultation on the original application and subsequent revisions, a number of objections have been submitted on the basis that the redevelopment of the site for housing of this scale does not accord with Barnet’s spatial strategy, as set out in the Council’s 2012 Local Plan Policies CS1 and CS3. This seeks to focus major housing growth within regeneration and development areas (Brent Cross/ Cricklewood; Colindale; and Mill Hill East), together with priority housing estates and priority town centres, whilst protecting and enhancing Barnet’s heritage and character within the established suburban areas of the borough. This overarching spatial strategy is predicated on delivering the 2012 Local Plan target of 28,000 homes between 2011/12 and 2025/26 (which equates to 1,866 homes a year). This target has been superseded by the higher 2016 London Plan target set out above and it is noted that this would increase further as part of the draft London Plan. Notwithstanding this, housing targets are expressed as minimums and are expected to be exceeded. The contribution made by ‘windfall’ sites such as this is therefore welcomed and would not be contrary to Barnet’s Local Plan, a view shared by Barnet Council officers. Furthermore, since the Barnet Local Plan was adopted in 2012, the Council has adopted the Planning Brief (2016) for the site which strongly supports the principle of a comprehensive residential-led mixed use redevelopment of the site. Most importantly, Policies CS1 and CS3 do not restrict the potential for comprehensive, large-scale residential and mixed use development coming forward outside the specific sites and broad locations set out in the Barnet Local Plan.

124 The proposed scheme would provide 844 homes (of which 41% would be affordable), which, if completed, would equate to 35% of Barnet’s annualised housing monitoring target in the current London Plan and 27% of the draft London Plan target, on an annualised basis. As such, GLA officers consider that the site would make a significant contribution towards the achievement of the Council’s housing targets and in meeting local and strategic pan-London need for overall and affordable housing.

Non residential uses

125 The application seeks planning permission for a total of 1,028 sq.m. of non-residential use, which would comprise a mix of Class A1 retail, Class A3-4 restaurant/cafe/drinking establishment use, and Class D1 community use. The applicant has provisionally stated that the intention is for these premises to accommodate a small convenience food store, dry cleaner, hairdresser, coffee shop, restaurant/bar and a nurse; however, this would be subject to demand. The existing and proposed non-residential floorspace is set out in Table 4.

Table 4 - Existing and proposed floorspace (GIA) in sq.m.

	Existing sq.m. (GIA)	Proposed sq.m. (GIA)	Net change (sq.m.)
Class A1 retail	9,053	405	-8,648
Class A3-A4 restaurant/cafe, drinking establishment	664	326	-338
Class D1 community use	0	297	297
Total	9,717	1,028	-8,689

GIA = Gross Internal Area

126 As set out above, the proposed development would result in a 96% net reduction in retail floorspace and 50% reduction in the quantum of restaurant/cafe use. GLA officers note that loss of retail facilities was raised as a reason for objection by a number of respondents to the consultation on the application. However, there is no planning policy basis on which to seek the protection of existing retail floorspace in this location, which would in fact be contrary to local, strategic and national planning policy. The site is approximately 880 metres from Mill Hill District Town Centre and for planning purposes is classified as an out-of-centre retail park, which in terms of its existing format, use and scale would not be supported by the clear 'town centre first' approach set out in London Plan Policy 2.15, 4.7, Policies SD6, SD7 and SD8 of the draft London Plan and Barnet Local Plan Policies CS6 and DM11.

127 Barnet Local Plan Policies CS6 and DM11 state that the Council will strongly resist retail and town centre uses outside town centres or the expansion of existing out of centre sites. The adopted Planning Brief describes the site as being an outmoded big box format, car orientated retail park and sets out the requirement to bring the site back into a more sustainable use as part of a comprehensive mixed use development. As such, the significant net reduction in commercial retail and restaurant floorspace accords with the town centre first approach set out above and the application therefore contributes towards the objectives of London Plan Policy 2.15, 4.7 and Policies SD6, SD7 and SD8 of the draft London Plan.

128 The quantum of proposed retail, restaurant/cafe and drinking establishment floorspace (in Class A1, A3-4 use) is intended to serve the needs generated by the residential development and is of an appropriate scale, taking into account the density of the scheme and the site's location in relation to surrounding town centres and amenities. The provision of these uses and their overall scale is consistent with the aspiration for mixed use development as set out in the Planning Brief and the requirement that these uses should be ancillary to the main residential use of the site.

Employment provision

129 Whilst the Planning Brief sets out a broad aspiration for employment uses, including flexible and affordable business floorspace suitable for small and medium sized enterprises (SMEs), the site is not designated for employment uses in the Local Plan, which in spatial terms seeks to steer employment uses away from locations such as this, with office uses promoted within town centre and edge of town centre locations and industrial uses guided towards Locally Significant Industrial Sites, in line with Policy DM14. Furthermore, the employment zone identified in the Planning Brief covers land that is either outside the application boundary or remains undeveloped within the proposed development, as it forms the southern entrance plaza to the scheme. As such, it is not clear how the proposed employment zone identified within the Planning Brief would be feasibly delivered as part of a mixed use scheme, taking into account the site access constraints and also having regard to other objectives set out in the Planning Brief and Local Plan policy. As such the absence of employment uses is considered acceptable.

Community use

130 London Plan Policy 3.16 and Policy S1 of the draft London Plan support the provision of adequate social infrastructure as part of new developments and states that facilities should be accessible by walking, cycling and public transport. London Plan Policy 3.18 and Policy S3 of the draft London Plan supports the provision of childcare facilities to meet growing demand. Barnet Local Plan Policy DM13 supports new community and educational uses where they are accessible by walking, cycling and public transport and would do not significantly impact road safety or traffic flow. The application seeks planning permission for 297 sq.m. of D1 community use, which is expected to accommodate a nursery. This floorspace would be secured by condition and is strongly supported, in accordance with the above policy framework. The facility is expected to cater for the

demand generated by the application once fully occupied and its location and design would accord with the criteria set out above. Objections have been made in relation to the impact of the application on the surrounding school and health care infrastructure capacity, which is covered in detail under 'impact on social infrastructure' (page 115).

Principle of development conclusion

131 Comprehensive redevelopment of this under-utilised and largely vacant out of town retail park site to provide a high density residential-led mixed use redevelopment, including appropriate levels of commercial and community use, accords with the land use principles set out in the Pentavia Retail Park Planning Brief and the planning policy and housing delivery objectives for such sites as set out in London Plan Policy 3.3, 2.15, 4.7 and Policies H1, SD6, SD7 and SD8 of the draft London Plan, Barnet Local Plan Policies CS3, CS4, CS6, DM11, DM14. As such, the principle of the development proposed accords with the Development Plan.

Housing and affordable housing

Affordable housing and financial viability

132 London Plan Policy 3.11 states that the Mayor will, and boroughs should, seek to maximise affordable housing provision and ensure an average of at least 17,000 more affordable homes per year in London up to 2031, of which 60% should be social/affordable rent and 40% intermediate. Barnet Council Local Plan Policies CS4 and DM10 set a borough wide target of 40% affordable housing and states that the Council will seek a tenure split of 60% social rent and 40% intermediate.

133 London Plan Policy 3.12 requires that the maximum reasonable amount of affordable housing should be sought when negotiating on individual private residential and mixed-use schemes, taking into account a range of factors including: the requirement for affordable housing; affordable housing targets; the need to promote mixed and balanced communities; specific site circumstances; development viability; public subsidy and the resources available to fund affordable housing; and the implications of phased development including provisions for re-appraising the viability of schemes prior to implementation ('contingent obligations'), and other scheme requirements.

134 In August 2017 the Mayor published his Affordable Housing and Viability Supplementary Planning Guidance (SPG) which sets out his preferred approach to maximising the delivery of affordable housing and introduced the 'Fast Track Route' for applications that meet or exceed the Mayor's threshold for affordable housing (by habitable room). The SPG confirms that a scheme's eligibility for the 'Fast Track Route' is subject to the affordable housing being provided on site (as opposed to off-site), without public subsidy and with an appropriate tenure mix provided. In addition, to qualify for the 'Fast Track Route', an applicant must have explored the potential to increase the level of affordable housing using grant funding and an Early Stage Review Mechanism must be secured, which seeks to incentivise the early implementation of any planning permission. Applications which are considered eligible for the 'Fast Track Approach' are not required to submit a financial viability assessment or be subject to a late stage viability review mechanism (as is required for applications which follow the 'Viability Tested Route').

135 The threshold approach to affordable housing is also set out in Policies H6 and H7 of the draft London Plan. Policy H5 of the draft London Plan seeks to maximise the delivery of affordable housing and sets a strategic target for 50% of all new homes to be affordable. Policy H6 of the draft London Plan identifies a minimum threshold of 35% affordable housing (by habitable room), with a threshold of 50% applied to public sector owned sites and industrial land (where

development results in a net loss of industrial capacity). Given that the site comprises a retail park in commercial ownership, it is subject to the 35% affordable housing threshold set out in the draft London Plan.

136 Policy H7 of the draft London Plan confirms the Mayor's priority to deliver genuinely affordable housing and sets out minimum expectations in relation to tenure split. This requires at least 30% of affordable housing to comprise low cost rented units (either social rent or London Affordable Rent); 30% intermediate housing; with the remaining 40% determined by the borough. As set out above, Barnet Local Plan Policies CS4 and DM10 set out the Council's preference for a 60:40 tenure split between low cost rented housing and intermediate housing.

137 The draft London Plan and the Mayor's Affordable Housing & Viability SPG confirm that different tenure requirements are in place for Build to Rent schemes and clarify that affordable housing provision within Build to Rent schemes may be solely intermediate Discount Market Rent housing (preferably at London Living Rent levels). This is due to the need for Build to Rent units to be retained in unified management by Build to Rent providers, as recognised by the Government's updated Planning Practice Guidance². For Build to Rent schemes to follow the 'Fast Track Route', at least 30% of the affordable housing must be at London Living Rent levels, with the remainder at a range of discounts below market rent, in accordance with Policy H13 of the draft London Plan. Barnet Council do not have any planning policies on Build to Rent developments.

138 The following section provides an assessment of the evolution of the affordable housing offer since the original application was made and considers the scheme's eligibility for the 'Fast Track Route' and the proposed affordability levels.

Evolution of the affordable housing offer

139 When the Mayor considered the application at Stage 1, the scheme proposed 717 residential Build to Rent units, of which 253 units (35%) would wholly comprise of affordable intermediate Discount Market Rent (DMR) units, all of which would be set at 80% of market rent. In response to the Mayor's Stage 1 representation, the applicant revised the application to provide 724 residential units (+7 units) and to amend the affordability levels of the proposed DMR units so that 30% (77 units) would comprise intermediate DMR units set at London Living Rent levels and the remaining 70% (177 DMR units) set at 80% of market rent. This complied with the criteria for eligibility for the 'Fast Track Route' for Build to Rent schemes, as set out.

140 At Stage 2, the Mayor made it clear that all options for increasing the level of on-site affordable housing must be secured, having regard to Barnet's Local Plan affordable housing target of 40% and the Mayor's objective to provide genuinely affordable homes. Since the Mayor's decision to take over the application in November 2018, GLA officers have worked with the applicant to secure additional affordable housing.

141 The revised application submitted to the Mayor on 25 March 2019 seeks planning permission for 844 residential units, of which 41% would be affordable (by both unit and habitable room). This represents a 120 unit increase in the total number of units proposed within the application considered by Barnet Council on 25 October 2018.

142 The revised scheme also proposes changes to the type and tenure of homes. Whereas the original scheme comprised solely of Build to Rent units, in the current application, 54% of the units are now proposed as Build to Rent and the remaining 46% would comprise a more traditional mix of market sale, shared ownership and London Affordable Rent units. The Build to Rent blocks within the revised scheme would comprise a mix of units at market rent, Discount Market Rent and

² <https://www.gov.uk/guidance/build-to-rent>

Discount Market Rent units at London Living Rent levels, as was the case in the application that was refused by Barnet Council. The evolution of the affordable housing offer from the initial submission of the planning application to date is summarised below in Table 5.

Table 5 – evolution of the application and affordable housing offer

	Initial submission (Dec 2017)	Amended application determined by LB Barnet on 25 October 2018)	Amended application submitted to the GLA on 25 March 2019
Private Build to Rent	464	470	270
Discount Market Rent	253	177	131
London Living Rent	0	77	57
London Affordable Rent	0	0	94
London Shared Ownership	0	0	63
Private Sale units	0	0	229
Total residential units	717	724	844
Total affordable units	253	254	345
% Affordable (by unit and habitable room)	35%	35%	41%

Assessment of the revised affordable housing offer

143 The current application seeks planning permission for 844 residential units, including: 270 private Build to Rent units, 131 Discount Market Rent (DMR) units, 57 DMR units at London Living Rent levels; and 229 private sale units, 94 London Affordable Rent units and 63 London Shared Ownership units. Overall, this equates to 41% affordable housing.

Table 6 – affordable housing

Tenure	Units	Habitable rooms	% by unit	% by habitable room
Discount Market Rent (DMR)	131	492	41%	41%
DMR at London Living Rent	57	213		
London Affordable Rent	94	375		
London Shared Ownership	63	232		
Private Build to Rent	270	1,019	59%	59%
Private sale	229	879		
Total	844	3,210	100%	100%

Proposed tenure mix

144 Overall, the scheme proposes a 73:27 split between intermediate and low cost rented affordable housing by unit and a 71:29 tenure split by habitable room. Whilst in overall terms this is weighted towards intermediate provision, this is a reflection of the fact that 54% of the proposed dwellings would comprise Build to Rent units. As set out above, different tenure mix requirements apply to Build to Rent schemes, as set out above, which mean that the affordable housing provision associated with that element of the scheme may be 100% intermediate rent. As such, to assess policy compliance in terms of tenure mix, GLA officers consider that it is appropriate to assess the

two distinct elements of the scheme separately in terms of the associated tenure split proposed. Both the Build to Rent and private sale components of the scheme would deliver 41% affordable housing but with different tenures of affordable housing associated with the Build to Rent element, as opposed to private sale element, set out in more detail below.

145 The Build to Rent component would include an affordable housing tenure split of 70% Discount Market Rent (DMR) units and 30% DMR units at London Living Rent Levels (by both unit and habitable room), as set out in Table 7 below. This complies with the minimum tenure mix requirements set out Policy H13 of the draft London Plan in terms of eligibility for the 'Fast Track Route' for a Build to Rent scheme.

Table 7 – affordable housing tenure split (Build to Rent component)

	Units	Habitable rooms	Tenure split by unit	Tenure split by habitable room
Private Build to Rent	270	1,019		
Discount Market Rent (DMR)	131	492	70%	70%
DMR at London Living Rent	57	213	30%	30%
Total	458	1,724		
Affordable %	41%	41%		

146 The private sale component of the scheme would provide an affordable housing tenure split of 60% London Affordable Rent and 40% London Shared Ownership (by unit) and 62:38 by habitable room, as set out in Table 8 below. This accords with tenure mix requirements set out in London Plan Policy 3.11, Barnet Council Local Plan Policies CS4 and DM10, Policy H7 of the draft London Plan and the Mayor's Affordable Housing & Viability SPG.

Table 8 – affordable housing tenure split (private sale component)

	Units	Habitable rooms	Tenure split by unit	Tenure split by habitable room
Private sale	229	879		
London Affordable Rent	94	375	60%	62%
London Shared Ownership	63	232	40%	38%
Total	386	1,486		
Affordable %	41%	41%		

147 As such, the application accords with the tenure mix requirements set out in London Plan Policy 3.11, Policy H7 of the draft London Plan, the Mayor's Affordable Housing & Viability SPG and Barnet Local Plan Policy CS4 and DM10.

Grant funding

148 To be eligible for the 'Fast Track Approach' the applicant must also have sought grant to increase the level of affordable housing beyond 35%, taking into account the Mayor's strategic target of 50%, in line with Policy H6 of the draft London Plan and the Mayor's Affordable Housing and Viability SPG. As the revised application would provide in excess of 40% affordable housing, all of the proposed London Affordable Rent and London Shared Ownership units would be eligible for

GLA grant (£28,000 per unit) under the ‘Developer led Route’, in line with the Mayor’s Affordable Homes Programme Funding Guide.

149 Notwithstanding the availability of grant, the proposed ‘baseline’ level of 41% affordable housing will be secured unconditionally in the Section 106 without reference to grant funding, in line with the agreed affordable housing tenure mix. In addition to the ‘baseline’ level of affordable housing secured, the applicant has stated that should GLA grant funding become available during the delivery timescales, this would enable the overall quantum of affordable housing to increase up to 45% (380 affordable units in total). This ‘with grant scenario’ will also be secured in the Section 106 agreement and would be subject to an appropriate trigger to ensure that grant is sought at an appropriate timescale and the potential to provide additional on-site affordable housing is maximised.

Early Stage Review Mechanism

150 Draft London Plan Policy H6 clearly sets out the requirements for review mechanisms, which are necessary to secure the maximum public benefit from schemes and to incentivise delivery. These requirements are echoed in the Mayor’s Affordable Housing & Viability SPG. An early stage review would be secured by the in the Section 106 agreement, which would be triggered if an agreed level of progress on implementation is not made within two years of the permission being granted, in accordance with Policy H6 of the draft London Plan and the SPG, with appropriate provisions included within the Section 106 to ensure additional affordable housing is provided on-site should the early review mechanism be triggered or this found to be viable. Substantial implementation would be defined as the first phase of construction of the scheme to podium level, which accords with the requirements of the SPG. Officers are satisfied that this review mechanism is required in this instance to incentivise delivery and accords with the Mayor’s Affordable Housing & Viability SPG and draft London Plan Policy H7.

Conclusion - Eligibility for the ‘Fast Track Route’

151 As the proposed tenure split accords with the tenure mix requirements and all other planning obligations requirements have been met, the scheme is compliant with the criteria set out in Policy H6 of the draft London Plan and the Mayor’s SPG and a late stage review mechanism is not be required in this instance. Appropriate triggers have been included within the Section 106 agreement to ensure the phased delivery of affordable housing within the scheme, linked to the occupation of market sale and market rent units.

Affordability

152 Policy H7 of the draft London Plan and the Mayor’s Affordable Housing and Viability SPG sets out the Mayor’s priority to deliver genuinely affordable housing. Paragraph 4.7.4 of the draft London Plan confirms that London Affordable Rent should constitute a low cost rent product for households on low income, with rent levels based on social rent and set in relation to the GLA’s published benchmarks set out in the Mayor’s Affordable Homes Programme 2016-21 Funding Guidance. The affordable rented housing would be let at London Affordable Rent levels set annually by the GLA and would be secured at this level in the Section 106 Agreement. This equates to between 34% and 54% of market rent in the area. Eligibility for LAR units would be restricted based on local need and subject to nominations agreement.

Table 9 - London Affordable Rent benchmarks

Unit size	London Affordable Rent (2017-18 benchmarks)*	% of market rent**
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1 bedroom	£144 per week	54%
2 bedroom	£153 per week	45%
3 bedroom	£161 per week	34%

*London Affordable Rents are exclusive of service charges

**Market rents based on GLA London Rents Map, which is based on 2018/19 Valuation Office Agency data. To enable comparison, monthly market rents shown in the GLA Rents Map have been multiplied by 12 and divided by 52 to provide estimated weekly rents.

London Shared Ownership units

153 London Shared Ownership units would be subject to the eligibility and household income requirements as set out in the draft London Plan to ensure that annual housing costs (including mortgage payments, rent and service charge) do not exceed 40% of net household income, assuming a maximum household income of £90,000 (as updated in the London Plan Annual Monitoring Report - 14, 2018). The applicant has stated that these units would be affordable to households on a range of incomes between £42,500 and £72,000 depending on the unit size, as set out below. This assumes a minimum 25% equity share, 2.75% rent and service charge, 2.5% deposit and 5% interest charge. This accords with the draft London Plan.

Table 10 – Affordability of proposed London Shared Ownership units

	1 bedroom unit	2 bedroom unit	3 bedroom unit
Estimated household income required	£42,500	£59,500	£72,500

Discount Market Rent and London Living Rent

154 The DMR units proposed at London Living Rent (LLR) units would be secured in the Section 106 at rents at or below the maximum GLA LLR rent levels for the Mill Hill Ward for financial year 2018/19 which are shown below in Table 11 and adjusted thereafter to account for future GLA publications. Currently, this would provide for a discount of between 61% and 80% compared to estimated market rents. The Section 106 agreement would also secure appropriate rent restrictions which would apply to all of the DMR and LLR units to ensure that annual housing costs, including rent and service charge, do not exceed 40% of net household income, assuming a maximum gross household income of £60,000 a year and to ensure that rent levels for any unit would not exceed 80% of market rent. This accords with the maximum income thresholds and affordability tests set out in the draft London Plan and the Mayor’s Affordable Housing and Viability SPG. In addition to this, the Section 106 includes provision for DMR and LLR units to be prioritised for key workers.

Table 11 - Monthly London Living Rent levels compared to estimated market rent levels

Unit size	London Living Rent*	% of market rent	Estimated market rent**
1 bedroom	916	80%	1,150
2 bedroom	1,018	73%	1,400
3 bedroom	1,120	61%	1,850

*London Living Rent - Mill Hill Ward – Financial Year 2018/19

**Source: GLA London Rents Map, which is based on 2018/19 Valuation Office Agency data

Conclusion on affordable housing and financial viability

155 In response to concerns raised by the Mayor at both consultation stage and Stage 2, GLA officers worked with the applicant to increase affordable housing provision in accordance with the Mayor's Affordable Housing & Viability SPG. The increased affordable housing offer (41%) meets Barnet Local Plan target and exceeds the applicable threshold level set by the draft London Plan and Mayor's Affordable Housing & Viability SPG.

156 The proposed tenure split accords with the requirements set out in the draft London Plan and Mayor's Affordable Housing & Viability SPG and the affordability levels proposed across each tenure would comply with the relevant requirement set by the NPPF, London Plan, draft London Plan and Barnet Local Plan. Details of the affordable housing in terms of eligibility, affordability and perpetuity will be secured in the Section 106 agreement, should permission be granted, with appropriate phasing triggers to secure the delivery of affordable housing on a phase by phase basis before the occupation of market homes, together with an early implementation viability review mechanism and 'with grant scenario' as described above.

157 The affordability levels proposed for London Affordable Rent, Discount Market Rent, London Living Rent and London Shared Ownership units are acceptable and comply with the London Plan income and eligibility requirements and would be secured at these levels in perpetuity within the Section 106 Agreement.

158 On this basis, the application accords with London Plan Policies 3.3, 3.4, 3.5, 3.8, 3.9, 3.11 and 3.12; the Mayor's Housing SPG (2016) and the Mayor's Affordable Housing & Viability SPG (2017); draft London Plan Policies GG4, D4, D5, D6, H1, H5, H6, H7, Barnet Local Plan Policies CS4, DM10 and the Pentavia Retail Park Planning Brief (2016).

Build to Rent units

159 The proposed Build to Rent units would be subject to a 15 year covenant and an appropriate clawback mechanism, both of which would be included within the Section 106 Agreement, in accordance with Policy H13 of the draft London Plan, the Mayor's Affordable Housing and Viability SPG, and Policy 3.8 of the London Plan. The purpose of the covenant and clawback would be to secure the Build to Rent units within the private rented sector for this period and require a clawback to be triggered in the event that the covenant is broken during the prescribed minimum period, for example, by any of the units being sold as private sale during this period. The clawback mechanism ensures that any affordable housing contributions which may have been negated as a result of the provision of Build to Rent units as opposed to market sale units (assuming this is the case) is recouped to provide additional affordable housing, which could have otherwise been secured. This would be calculated on the basis of the sales value of any units disposed of during the covenant period, compared to an agreed market value of the Build to Rent units (based on current day values) and would be provided in the form of a cash in lieu payment.

160 For the avoidance of doubt, all of the Discount Market Rent and London Living Rent affordable units within the Build to Rent element of the scheme would be secured in perpetuity, in line with London Plan Policy 3.10, Policy H13 of the draft London Plan and the Mayor's Affordable Housing and Viability SPG. Other provisions, including unified ownership and management, length of tenancy and certainty over rent levels, would also be secured in the Section 106 Agreement. As such, in relation to the proposed Build to Rent units, the application accords with the requirements set out in London Plan Policy 3.8 and Policy H13 of the draft London Plan and the Affordable Housing and Viability SPG.

Housing size mix and tenure

161 London Plan Policy 3.8 states that new development should provide a mix of housing sizes and types, taking into account local and strategic housing requirements, the needs of different groups, the strategic priority for affordable family housing provision and the need to support the private rented sector. Policy H12 of the draft London Plan states that schemes should generally consist of a range of unit sizes and sets out a number of factors which should be considered when determining the appropriate housing mix on a particular scheme. This includes housing need and demand, the nature and location of a site and the requirement to optimise housing potential and deliver mixed and inclusive neighbourhoods.

162 Barnet Local Plan Policy CS4 seeks a range of dwelling sizes and types of housing, including family homes and Policy DM08 states that development should provide an appropriate mix of dwellings types and sizes to provide choice. Policy DM08 sets out the Council's priority for family housing across all tenures and sets out the following priorities, which are informed by the North London Strategic Housing Market Assessment (2011):

- Social rent – 3 bedroom units (high priority)
- Intermediate – 3/4 bedroom units (high priority)
- Market – 4 bedroom units (high priority); 3 bedroom units (medium priority)

163 The 2017 London Strategic Housing Assessment (SHMA), which covers the period 2016 to 2041, identifies a significant need for 1 and 2 bedroom units, across all tenures. The applicant's proposed housing mix is shown below and includes 15% family sized units, 52% two bedroom units and 33% one bedroom units.

Table 12 – Overall housing mix

Unit size	Units	% mix
Studio	4	0%
1 Bedroom	281	33%
2 Bedroom	436	52%
3 Bedroom	123	15%
Total	844	100%

Table 13 – housing mix by tenure

Unit size	Private Rent		Intermediate rent		Private Sale		London Affordable Rent		Shared ownership	
	units	%	units	%	units	%	units	%	units	%
Studio	4	1%	0	0%	0	0%	0	0%	0	0%
1 Bedroom	83	31%	71	38%	84	37%	21	22%	22	35%
2 Bedroom	153	57%	93	49%	98	43%	53	56%	39	62%
3 Bedroom	30	11%	24	13%	47	21%	20	21%	2	3%
Total	270	100%	131	100%	229	100%	94	100%	63	100%

164 Whilst the scheme is weighted towards the provision of one and two bedroom units (85%), a greater proportion of family sized homes is proposed within London Affordable Rent and private sale tenures (21%). This responds positively to the Council's priorities set out above and would make an important contribution towards Barnet's priority for family sized. Overall, the scheme

provides a good mix of housing tenures, types and unit sizes across a range of tenures and affordability levels and, as such, the proposed dwelling size mix is acceptable in view of density and form of the development and the site’s location and characteristics.

Play space

165 Policy 3.6 of the London Plan states that development proposals that include housing should make provision for play and informal recreation, based on the expected child population generated by the scheme and an assessment of future needs. Further guidance on the application of this policy is provided in the Shaping Neighbourhoods: Children and Young People’s Play and Informal Recreation SPG (2012), which sets a benchmark of 10 sq.m. of useable child play space to be provided per child. Policy S4 of the draft London Plan states residential developments should incorporate good quality, accessible play provision for all ages, of at least 10 sq.m per child. Play space provision should normally be provided on-site; however, off-site provision may be acceptable where it can be demonstrated that this addresses the needs of the development and can be provided nearby within an accessible and safe walking distances, and in these circumstances contributions to off-site provision should be secured by Section 106 agreement.

166 Based on the housing mix in Table 13 and the GLA’s play space calculator, a child yield of 173 can be expected, resulting in a requirement for 1,730 sq.m of playspace. In total, the applicant’s revised play space and landscape strategy shows that a total of 1,876 sq.m. of play space would be provided, all of which would be located within the sheltered internal courtyard and would be well-overlooked by the adjacent buildings. Sufficient quantities of play space would be provided for each age group, as shown below. The play space provision would comprise an appropriate mix of naturalistic and informal play features within the landscaping as well as formal play space areas and equipment. All of the proposed play space would be accessible and usable by all residents within the scheme, irrespective of tenure, as with all public open spaces within the scheme. Full details of this would be secured via a condition.

Table 14 – play space requirements and on-site/off-site provision

Age group	Expected child yield	Play space required sq.m.	Proposed play space sq.m.	Balance
Under 5	96	960	1,023	+ 63
5 to 11	50	500	513	+ 13
12+	28	280	340	+ 60
Total	173	1,730	1,876	+ 136

167 The GLA published an updated play space calculator in June 2019, which if applied to the scheme would generate an increased requirement for play space provision, against which there would be a shortfall within the scheme. However, as the publication of this new calculator followed the submission of the revised application in March 2019 and the recent revisions submitted to the GLA in May 2019, it would not be appropriate to apply this retrospectively to the application. Moreover, GLA officers consider the overall quantity and quality of play space provision to be of an acceptable standard. As such, the application accords with London Plan Policy 3.6 and Policy S4 of the draft London Plan, as well as the qualitative design principles set out in Barnet’s Residential Design Guide SPD and the 2016 Housing SPG.

Housing quality and residential standards

Density

168 London Plan Policy 3.4 requires new development to optimise housing output, having regard to site context and character, urban design principles and public transport capacity. Table 3.2 of the London Plan includes a sustainable residential quality (SRQ) density matrix which sets out broad density ranges by Public Transport Accessibility Level (PTAL) and setting. These are advisory and paragraph 3.28 of the London Plan clarifies that the density matrix should not be applied mechanically to individual applications. Paragraph 1.3.51 of the Housing SPG (2016) states that it may be acceptable for schemes to exceed the ranges in the density matrix in appropriate circumstances, providing qualitative design and management concerns are addressed, including the requirement to achieve high quality design in terms of liveability, public realm, residential and environmental quality and having regard to other factors such as the proposed housing mix and planned infrastructure provision. It outlines the potential for large sites such as this to define their own characteristics in terms of setting and accommodate higher densities.

169 Policy D6 of the draft London Plan places a greater emphasis on optimising the density of a site through a design-led approach, whilst also having regard to the above factors in terms of context, public transport access and infrastructure capacity. It states that the higher the density of a development, the greater the level of design scrutiny is required and sets out notional density thresholds, above which any application that is referable to the Mayor need to have undertaken a design review and submit a management plan.

170 The 3.87 hectare application site has a PTAL level of between 1a and 3, with the majority of the site falling within PTAL 1b. In view of the site's close proximity to major arterial roads, as well as the size and footprint of the existing buildings on site, GLA officers consider that the site should be classified as 'urban' for the purpose of applying the density matrix, in line with the advice notes set out within Table 3.2 of the London Plan. This would suggest an indicative guideline density range up to 170 residential units per hectare / 450 habitable rooms per hectare for the area in PTAL 3; and 95 units per hectare / 250 habitable rooms per hectare for the area in PTAL 1.

171 As part of the Transport Assessment, the applicant has undertaken a site specific PTAL assessment to examine the potential impact of the proposed site access improvements on Bunns Lane, together with the proposed relocation of the bus stops on Bunns Lane and the A1 (northbound) and increases in the frequency of the route 221, which would be secured by planning obligation prior to occupation. This demonstrates that these measures would improve the site's overall connectivity to public transport services and ensure that all of the proposed residential blocks would achieve PTAL 2 scores, with Block M which is closest to the new site access on Bunns Lane, achieving a PTAL score of 3. Based on the site's future PTAL score, the indicative density range for the entire site would be up to 170 residential units per hectare / 450 habitable rooms per hectare.

172 Taking into account the site area (3.87 ha) and the proportion of the scheme which is in non-residential use (1%), the application has a net residential density of 220 units per hectare / 838 habitable rooms per hectare. This exceeds the relevant guideline range in the London Plan SRQ density matrix, both in terms of the existing site PTAL and the expected future PTAL for the site. Based on the site's existing PTAL, the requirement for additional design scrutiny and management set out in Policy D6 of the draft London Plan would be triggered.

Design Review

173 Whilst the scheme was subject to pre-application advice from LB Barnet Council and GLA design officers, a formal design review was not undertaken by LB Barnet Council prior to their decision to refuse the application on 25 July 2018. Following the Mayor's decision to take over the determination of the application on 5 November 2018, the amended scheme was subject to an independent design review on 6 February 2019, which was undertaken by the Mayor's London Review Panel, with panellists drawn from the Mayor's team of Design Advocates. A summary of the

main points raised by the London Review Panel is provided below and is referred back to and examined in more detail within the relevant sections of this report.

Residential and environmental quality

- Concerns over the large number of north-east facing single aspect flats and those with west-facing bedrooms overlooking the M1 and units with windows that would not open.
- Plans should be adjusted to remove corner to corner overlooking between buildings, which would impact on privacy.
- Whilst the panel recognised the exceptionally difficult nature of the site, they expressed a general concern that proposed design approach would not provide sufficiently high quality residential accommodation in terms of liveability and quality of life.

Layout, form and massing

- Whilst the proposed building heights do not represent a problem, a more creative and nuanced approach to architectural expression and the massing of the scheme is needed to humanise development in this challenging context and create townscape quality.
- General concerns about the proposed layout comprising two large blocks surrounding a central space and whether there are good precedents for this approach and whether alternatives have been fully considered. Further evidence should be provided to demonstrate that proposed layout is required to resolve air quality and noise issues and greater consideration given to the function and purpose of the proposed landscaping

Accessibility and connectivity

- Further analysis should be undertaken using available pedestrian movement tools to consider how the proposed layout would support the aim to connect to the surrounding movement network, given the island nature of the site.
- A stronger relationship should be formed with residential area to the north of the site and connections to the bus stops on the A1 should be enhanced.

Management and maintenance

- Concern that service charges for residents will be very high due to high lift to flat ratios and maintenance of unadopted streets, landscaping and car park.

Response to the MDA design review

174 Following the MDA design review, the applicant has made a number of revisions to the scheme in terms of the height and massing of certain blocks and the architectural approach and the proposed facade materials. Further information and analysis has also been provided within the applicant's Design and Access Statement in response to the panel's comments. In addition to this, GLA officers have worked with the applicant to identify and resolve a number of urban design issues in relation to residential quality through further discussion and design workshops, following the submission of the revised application in March 2019.

175 In response to GLA officer comments, the applicant has made a number of design amendments to the scheme to address a number of outstanding issues in relation to privacy and overlooking, the provision and configuration of balconies and winter gardens, the design,

landscaping and ownership of ground floor private amenity spaces, the internal layout of certain residential units and their outlook and daylighting, the location and design of communal core entrances. The applicant has responded positively to these concerns and made a number of design amendments. An appraisal of the design quality of the scheme is provided in the following sections of this report.

176 The applicant has submitted a detailed management plan setting out how the development will be managed on a day to day basis and outlining maintenance and service charges. This confirms that on-site management would be provided by the applicant’s subsidiary estate management company - ‘Meadow Living’ – serving Build to Rent, private sale and shared ownership blocks, with a help desk, concierge and security team provided.

177 In terms of service charges, the applicant has provided an initial estimate of the likely service charges in their management plan and taking into account the likely costs associated with the management and maintenance of buildings and landscaping, on-site management and security, refuse collection and the management and ongoing maintenance of utilities and energy infrastructure and lifts. These are set out below. This includes. Rent levels for Build to Rent units, including private rent, DMR and LLR units would be inclusive of service charges, with service charges in addition to the LAR benchmarks set out above. The applicant has stated that all residents will have access to the public amenity spaces provided on site. A more detailed scheme covering the proposed service charges will be required as part of the Section 106. Planning obligations would ensure that the total cost of rent and service charges for London Affordable Rent units would be restricted to ensure that the combined costs do not exceed Local Housing Allowance Levels for the area.

Table 15 – estimated service charges per residential unit (across all tenures)

Unit size	Estimated service charge
1 bedroom	£35 per week
2 bedroom	£45 per week
3 bedroom	£55 per week

Conclusion – density

178 The proposed higher density residential-led redevelopment of the site has been subject to an appropriate level of design scrutiny and, subject to the conditions and obligations set out above being secured in relation to bus and social infrastructure capacity, pedestrian, cycle and inclusive access, residential and environmental quality, design, landscaping, play space and management, the application accords with London Plan Policy 3.4, Policy D6 of the draft London Plan , as well as the 2016 Housing SPG, Residential Design Guide SPD and Pentavia Retail Park Planning Brief.

Standard of residential accommodation

179 London Plan Policy 3.5 seeks to ensure that housing developments are of the highest quality both internally and externally and sets out minimum space standards for dwellings, which are based on the nationally described space standards. The 2016 Housing SPG provides further detailed guidance on residential design quality and sets baseline standards covering units per floor per core ratios, private open space provision, dual aspect and single aspect dwellings and recommended floor to ceiling heights. Policy D4 of the draft London Plan carries forward the adopted minimum space standards and confirms that these apply to all tenures of self-contained

residential accommodation. It sets out minimum requirements for private open space, ceiling height and requires developments to maximise the provision of dual aspect dwellings.

Internal and external space standards

180 Table 3.3 of the London Plan and Table 3.1 of the draft London Plan set out minimum internal space standards for new homes, which are set out below. All of the proposed units would either meet or exceed this minimum standard, as set out below in Table 16, with the majority provided with higher levels of internal space. Four studio sized units are proposed, which would be in Build to Rent blocks and in private rent tenure. These would measure 44 sq.m. in size, exceeding the minimum 37 sq.m. London Plan standard. In terms of ceiling height, all of the proposed residential units would comply with the 2.5 metre standard set out in the draft London Plan, which is strongly encouraged in the 2016 London Plan and Housing SPG. Overall, having assessed the room layouts, GLA officers consider these would provide an acceptable quality of accommodation. Compliance with the approved floorplans would be secured by planning condition.

Table 16 – minimum space standards and proposed average provision

Unit size	Minimum London Plan standard	Proposed average unit size
Studio	37	44
1 bedroom 2 person	50	56
2 bedroom 3 person	61	64
2 bedroom 4 person	70	82
3 bedroom 4 person	74	97
3 bedroom 5 person	86	90
3 bedroom 6 person	95	107

Dual aspect

181 The 2016 Housing SPG states that development should minimise the number of single aspect units and avoid the provision of single aspect units that are north facing; contain three or more bedrooms; or are exposed to noise levels above which significant adverse effects on health and quality of life occur. Policy D4 of the draft London Plan states that development should maximise the provision of dual aspect units and normally avoid the provision of single aspect units, with these only provided where these are considered a more appropriate design solution and provide acceptable quality of accommodation in terms of passive ventilation, daylight, privacy and overheating.

182 In total, 62% of the units would be dual aspect (526 units) and 38% of would be single aspect (318 units). No single aspect units are proposed facing the M1 Motorway and all of the units proposed alongside this site boundary would benefit from a living space facing onto the internal courtyard. Of the 318 single aspect units proposed, 88% would face onto the internal courtyard, with 30 units facing the A1 within Blocks H, F and D and 7 single aspect units facing the landscape embankment adjoining Bunns Lane within Blocks R and M.

183 Where single aspect units are proposed adjacent to the A1, the residential blocks have been angled and set back from the highway and provided with buffer landscaping (between 19 metres and 32 meters). Appropriate noise mitigation and control measures would be provided to ensure these units are not exposed to unacceptable noise levels and to ensure compliance with World Health Organisation and British Standards (BS:8233: 2014), which would be secured by condition and is set out in detail in the noise section of this report. Furthermore, these units would be

east/north-east facing and are therefore not expected to experience overheating as a result of solar gain.

184 A total of 26 north facing units are proposed in Blocks H, F and D, all of which face onto the internal courtyard, which was a point raised during the MDA design review. Whilst it would normally be preferable to avoid such units, GLA officers recognise that the layout of the scheme is primarily driven by the need to shelter as many units as possible away from the A1, so this is acceptable in this particular instance. Furthermore, having reviewed the units in question in terms of internal layout, outlook and taking into account the applicant’s daylight and sunlight assessment, GLA officers consider these units would be of an acceptable residential quality.

185 In response to concerns raised by GLA officers and the MDA design review panel, the applicant has made revisions to the design of three bedroom units adjacent to the M1 in the block corners. This ensures these units are provided with larger dual aspect living spaces, increased frontage and outlook onto the internal courtyard, as well as recessed balconies. This ensures that these units would be of an acceptable residential quality, with improved daylight and sunlight.

Private open space

186 The 2016 Housing SPG and Policy D4 of the draft London Plan state that a minimum of 5 sq.m. of private outdoor space should be provided for 1-2 person dwellings and an extra 1 sq.m. should be provided for each additional occupant. The depth and width of private amenity spaces should be at least 1.5 metres. Paragraph 2.3.32 of the Housing SPG recognises that there may be exceptional circumstances where site constraints meant that it is impossible for private open space, dwellings may be provided with additional living space equivalent to these requirements.

187 As part of the latest revisions to the application submitted to the GLA in May 2019, the applicant has made a number of amendments to the proposed layout of units, in response to comments provided by GLA officers in relation to residential quality and landscaping. In line with GLA advice, this ensures that 99% of the units would be provided with some form of private amenity space, whereas in the application documents submitted in March 2019, approximately 160 units (19%) were proposed without private amenity space. A range of private amenity spaces are proposed in the form of balconies, winter gardens and defensible spaces/landscaped terraces serving ground floor units facing the internal courtyard and Bunns Lane, and is set out in Table 17. This overall strategy is driven by the environmental site constraints in relation to noise and air quality which are discussed in more detail below.

Table 17 – private amenity space provision by type

Type of private amenity space	No. units	%
Balcony	458	54%
Winter garden	241	29%
Winter garden and balcony	75	9%
Ground floor defensible space	62	7%
No private amenity due to air quality/noise issues	8	1%

188 A total of 8 residential units would not have any private amenity space, which is equivalent to 1% of the overall number of homes proposed. The units are on the ground floor facing the landscape screening adjacent to the A1 and would have sealed windows in order to mitigate and control the noise and air quality constraints, hence, so it would not be appropriate to provide private amenity space serving these units. All of these units in question would be provided with

levels of internal space in excess of the minimum London Plan standards, in line with the requirements of the 2016 Housing SPG which is acceptable.

189 Units facing the internal courtyard and Bunns Lane are generally provided with balconies, with winter gardens provided where private amenity spaces are proposed adjacent to the A1. A total of 44 units have winter gardens alongside the M1 boundary, however, in all of these instances, these are dual aspect units which benefit from having an additional balcony on the internal courtyard side of the scheme and serve three bed units, which is acceptable. Overall, taking into account the site constraints, the private amenity space provision is acceptable and would be secured by condition.

Outdoor amenity space

190 Barnet Local Plan Policy DM02 states that development should comply with the outdoor amenity space standards set out in Barnet’s Sustainable Design and Construction SPD, which requires a minimum of 5 sq.m. of outdoor amenity space per habitable room for flats. This may be in the form of communal open space, private gardens, roof gardens or balconies. The revised application proposes 3,210 habitable rooms, which therefore necessitates a total requirement for 16,050 sq.m. of outdoor amenity space. The application provides a total of 16,971 sq.m of amenity space which would comprise of a combination of public open space within the residential courtyard, private rooftop gardens and private balconies and winter gardens, as set out in Table 18.

Table 18 – outdoor amenity space requirements and provision (sq.m.)

Type of amenity space	Sq.m.
Open green space within communal courtyards	6,623
Private roof top gardens for use by residents in each block	3,804
Private balconies, winter gardens and defensible space	6,544
Total amenity space proposed	16,971
SPD amenity space requirement	16,050
Net surplus/shortfall	+ 921

191 Whilst sealed winter gardens would comprise 2,290 sq.m. of the amenity space provision, this is considered acceptable in this instance given that the noise and air quality constraints present, and in view of the advice in Barnet’s Residential Design Guidance SPD (2016) and the Housing SPG (2016). Having reviewed the proposed design, layout and management of the external amenity spaces, and taking into account the requirements set out in Barnet’s Residential Design Guidance SPD, GLA officers are satisfied that these would be of an acceptable quality in terms of landscaping, overlooking, privacy, accessibility, sunlight, noise and air quality, matters which are covered in more detail in the relevant sections of this report. A condition would be attached to require the submission and approval of a detailed scheme for landscaping, public realm, plays space and landscaped boundaries to secure these elements of the scheme. As such, the proposed amenity space provision complies with Barnet Local Plan Policy DM02 and the above SPDs.

Privacy and overlooking

192 Barnet Local Plan Policy DM01 states that development should be designed to ensure adequate privacy for adjoining and potential occupiers, with more specific guidance provided in the Residential Design Guidance SPD (2016). This requires a minimum separation distance of at least 21 metres between facing windows serving habitable rooms to avoid overlooking. London Plan Policy 7.6 states that buildings should not cause unacceptable harm to the amenity of surrounding land and buildings in relation to privacy, alongside other factors. The proposed separation distances

across the public courtyard spaces would comply with this 21 metre minimum standard, with the majority of courtyards ranging in dimensions from 21 metres to 37 metres in width and 27 metres to 72 metres in length.

193 The MDA design review panel raised some concerns about corner overlooking between the right angled blocks fronting the internal courtyard and, following this, potential privacy and potential overlooking issues have been reviewed and commented on in more detail by GLA officers. In response to this, the applicant has made a number of design amendments as part of the revised application documents submitted in May 2019, which were discussed and agreed with GLA officers during design workshops.

194 These design changes involve amending the location and configuration of balconies, providing either solid or opaque balcony sides and, at ground level, relocating communal cores entrances so that they are moved away from residential bedrooms. The definition and ownership of the defensible landscaped private amenity spaces serving residential units fronting the internal public courtyard and Bunns Lane has also been improved. In addition to this, GLA officers highlighted potential overlooking issues between taller elements of certain blocks from the sixth floor upwards where some units would be within 5 metres of each other. These interfaces have been satisfactorily dealt as part of the applicant's May 2019 resubmission with the proposed layout, design and orientation of units, windows and balconies altered to remove the potential for overlooking or privacy issues.

195 Whilst privacy control/mitigation measures such as screens and opaque glazing would be required in some instances due to the close proximity of some of the blocks, this has generally been minimised, in accordance with Barnet Council's Residential Design Guidance SPD. In this particular instance, GLA officers are mindful that the proximity of residential units and potential for corner to corner overlooking is driven by the need for blocks to be laid out in a staggered manner alongside the A1 and M1 to effectively shelter the internal courtyard and prevent ingress of noise and air pollution.

196 Overall, GLA officers are satisfied that the revised application is acceptable in terms of privacy and overlooking in terms of the internal design and layout of the scheme. An assessment of the privacy and overlooking impacts in terms of neighbouring amenity impacts is provided below. Notwithstanding this, should planning permission be granted, GLA officers recommend that the applicant is required to provide a more detailed scheme for the design and placement of balconies, windows, winter gardens, privacy screens and landscape boundaries are required by condition, so that more detailed matters covering materials, placement and design can be addressed prior to commencement.

Internal daylight, sunlight and overshadowing

197 Barnet Council Policy DM01 states that new development should be designed to allow for adequate daylight and sunlight for potential occupiers, with further guidance provided in the Council's Sustainable Design and Construction SPD. The applicant has submitted an updated internal daylight, sunlight and overshadowing assessment which assesses the adequacy of the internal light provision within all of the residential units located on the ground and first floor level in all of the 18 blocks within the scheme (Blocks A to R) by reference to the Building Research Establishment's (BRE) guidelines³ and the recommended Average Daylight Factor (ADF) target values for the level of daylight within living rooms, kitchens and bedrooms. This assessment has

³ British Research Establishment (BRE) guidelines – Site Layout Planning for Daylight and Sunlight. A Guide to Good Practice.

been updated to support the submission in May 2019 of revised internal layouts and balcony locations/configurations.

198 Average daylight factor (ADF) is a measure of the quality and distribution of light distribution within rooms, taking into account the size and number of windows. BRE guidelines set out recommend minimum target values for ADF, which vary depending on the use of a room. Bedrooms are subject to a 1% target and 1.5% and 2% applied to living rooms and kitchens respectively. Whilst the BRE guidelines do not form part of the development plan, it provides an industry standard method of assessment for daylight, sunlight and overshadowing issues and is generally relied on by planning authorities as a comparative benchmark for assessment purposes. The Housing SPG (2016) states that BRE guidelines should be applied sensitively to higher density development, taking into account location, context and broadly comparable housing typologies found in London. Similarly, recent amendments to the NPPF (2018) state that planning authorities should take a flexible approach when applying daylight and sunlight guidelines, where these would inhibit making the efficient use of a site and where an acceptable living standard would be achieved.

199 Of the 489 rooms assessed, 359 of the rooms would meet the minimum Average Daylight Factor (ADF) target values recommended in the BRE guidelines (73%), based on the applicant's revised assessment submitted in May 2019. Of the rooms which fail the BRE guideline for ADF, the vast majority face onto the internal courtyard - 64% are bedrooms, 36% are living rooms. The applicant's internal daylight/sunlight assessment does not provide an assessment of residential units located on higher levels within the scheme on the basis that these conditions can be expected to improve as height increases. Consequently, the assessment findings are considered to represent a 'worst case' scenario for the scheme as a whole.

200 In terms of the overshadowing of public and communal amenity spaces, BRE guidelines recommend that at least half of the amenity area within a development should receive at least two hours of sunlight (based on 21 March spring equinox). The applicant's overshadowing assessment demonstrates that 68% of the proposed amenity spaces within the scheme, including the public courtyard and roof top amenity spaces would meet this benchmark.

201 Whilst a higher level of compliance with BRE guidelines in terms of ADF could normally be expected to be achieved on a site of this size, GLA officers recognise that the internal daylight conditions achieved within this particular scheme are primarily influenced by the inward facing layout of the scheme. This is driven by the need to address the site constraints in relation to noise and air quality that are associated with the site's proximity to major roads, which has also meant that most of the living rooms are provided facing onto the internal courtyard, which has more restricted daylight levels. Furthermore, the BRE guidelines should be applied with an appropriate degree of flexibility to higher density schemes within London. Therefore, on balance, GLA officers consider that the development would achieve acceptable levels of daylight for the proposed residential units, taking into account the site constraints.

Noise

202 The site is located in a high noise environment, sandwiched between two major roads and the Midlands Mainline Railway, which are all major noise sources. Road based noise generated by the A1 and M1 is relatively persistent and continuous in nature through the day and night, although traffic frequencies are reduced during the night time hours. Train based noise contributes to the overall levels of noise and vibration experienced on the site, though this is more infrequent and the dominant noise source is attributable to road based vehicles.

203 Paragraph 180 of the NPPF states that planning decisions should seek to ensure that new development is appropriate for its location taking into account the likely effects (including

cumulative) of pollution and living conditions by ensuring potential adverse impacts resulting from noise are mitigated or reduced to a minimum; and noise levels which give rise to significant adverse impacts on health and the quality of life are avoided. Further guidance is provided in the Government’s Planning Practice Guidance (PPG) and the Noise Policy Statement for England (NPSE) (2010).

204 Whilst the PPG and NPSE do not provide decision makers with technical or numerical values for categorising and assessing noise levels in decibels (dBs) in terms of their impact, industry standard guidelines set out in British Standard BS8233:2014 ‘Guidance on sound insulation and noise reduction for buildings’ recommends that daytime noise levels do not exceed 35 dB and night-time values in bedrooms do not exceed 30 dB. This is aligned with the World Health Organisation recommendations set out in Guidelines for Community Noise (1998). With regard to external private and communal amenity spaces, British Standard BS8233:2014 recommends that external noise levels do not exceed an upper guideline value of 55 dB.

205 London Plan Policy 7.15 and Policy D13 of the draft London Plan state that development should manage noise to improve health and quality of life by: avoiding significant adverse noise impacts on health and quality of life; mitigating and minimising existing and potential adverse noise impacts within the vicinity of new development; separating new noise sensitive development from major noise sources through the use of screening, internal layout, set back distances; and where this is not possible, adverse effects should be controlled and mitigated by incorporating good acoustic design principles. The Mayor’s London Environment Strategy aims to reduce the number of people adversely affected by noise and includes a wide range of policies and proposals to support this aim.

206 Barnet Local Plan Policy DM04 states that proposals to locate noise sensitive development in areas with existing high levels of noise will not normally be permitted and states that noise impacts should be mitigated through design, layout and insulation. The Pentavia Planning Brief highlights the noise constraints associated with the site’s proximity to major transport corridors and states that application will need to be supported by a detailed noise assessment to examine the severity of noise levels and to establish the appropriate mitigation measures required. Barnet Council’s Sustainable Design and Construction SPD (2016) provides more detailed guidance covering noise quality and acoustic design mitigation and sets out the following pre-planning risk assessment advice for applicants, which is summarised below in Table 19.

Table 19 – Barnet SPD noise risk assessment classifications

Noise Risk Category	Indicative noise level range	Potential effect if unmitigated
Negligible	<50dB	Noticeable but no adverse effect on health and quality of life
Low	50dB-63dB	Adverse effect on health and quality of life
Medium	63-69dB	Significant adverse effect on health and quality of life
High	>69dB	Unacceptable adverse effect on health and quality of life

207 The SPD advises that applications may be refused where ‘low’ or ‘medium’ noise risk levels are identified, unless this is mitigated through good acoustic design and acceptable noise levels achieved and secured via planning condition. Where noise levels would remain at ‘high’ levels, following mitigation, the SPD states that applications are likely to be refused on noise grounds. The SPD states that external private and communal outdoor amenity areas including balconies, terraces, roof gardens and communal gardens should comply with British Standard recommended limit of 55 dB and, where this cannot be achieved, winter gardens should be considered.

208 An updated Noise Impact Assessment (2019) has been submitted as part of their Environmental Statement. This establishes the baseline noise levels at the site during the day and night, following noise monitoring surveys undertaken during 2015 and 2016 at three survey points within the site adjacent to the M1, A1 and Bunns Lane. GLA officers consider this assessment to be of an acceptable quality and the methodology and noise modelling undertaken in line with industry standard practice.

209 Average noise levels recorded alongside the M1, A1 and Bunns Lane are set out below in Table 20. Survey data shows that the highest noise levels were found adjacent to the M1, with similarly high levels surveyed adjacent to the A1, which in both locations would exceed the ‘high’ threshold set in Barnet’s SPD. Comparatively lower noise levels found at the northern boundary of the site adjacent to Bunns Lane. Monitoring undertaken as part of the assessment shows that noise levels gradually attenuate across the site over distance and due to the screening from the existing buildings.

Table 20 – Average baseline noise levels dB

	Daytime	Night time
Survey point adjacent to the M1	72.7	69.0
Survey point adjacent to the A1	72.5	68.7
Survey point adjacent to Bunns Lane	67.5	63.2

210 Noise monitoring survey data has informed the development of an acoustic noise model showing noise level contours for the site and surrounding area for a 2016 baseline and 2021 operational development. This latter scenario analyses the expected noise levels for the completed development, taking into account the proposed layout of the scheme and other acoustic design mitigation measures proposed as well as the cumulative noise impact of additional road traffic associated with the development and other approved developments in the area. The 2016 baseline modelled noise contours are set out below in Figure 3 and 4.

Figure 3 – Baseline modelled noise contours daytime (2016)

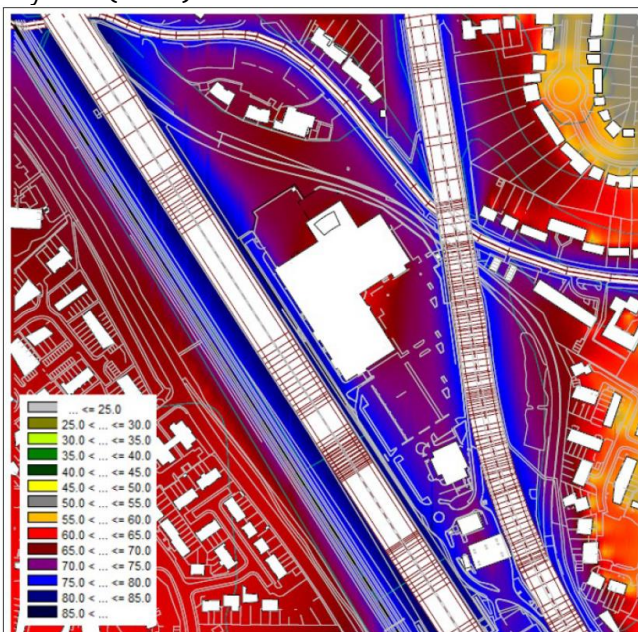


Figure 6.1: Baseline 2016 Daytime Noise Levels (L_{Aeq,16hour}) at 1.5m

Figure 4 – Baseline modelled noise contours night time (2016)

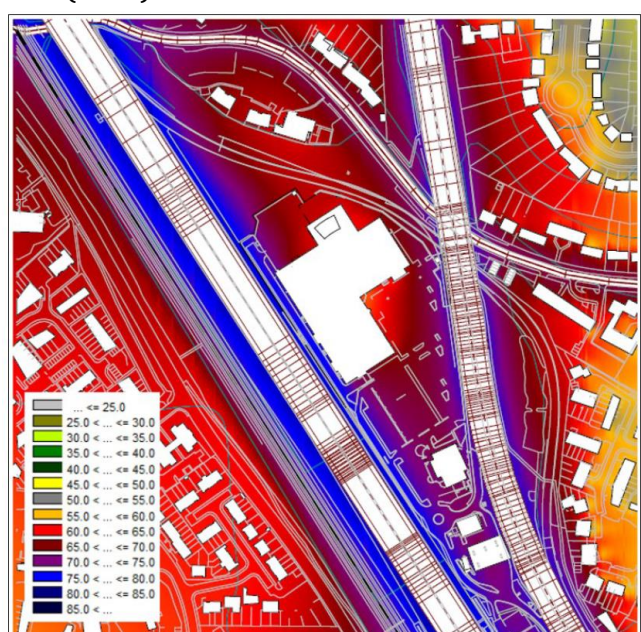


Figure 6.2: Baseline 2016 Night-time Noise Levels (L_{Aeq,8hour}) at 4m

Proposed mitigation

211 The acoustic modelling undertaken as part of the applicant's Noise Impact Assessment demonstrates that the proposed massing and layout of the scheme would help to substantially reduce external noise levels within the central courtyard and ensure that the majority of this open space would benefit from noise levels below the maximum 55dB guideline recommended by World Health Organisation (WHO), British Standards (BS8233: 2014) and Barnet's Sustainable Design and Construction SPD. There would be some leakage of higher noise levels at the northern and southern entrances to the scheme and, to a lesser extent, at the proposed arched walkway courtyard entrance between Blocks M and K; however, these exceedances would be limited to between 55dB to 65dB and spatially limited. Daytime and night time noise levels for the operational development in 2021 are shown below in Figure 5 and 6.

Figure 5 – Operational modelled noise contours daytime (2021)

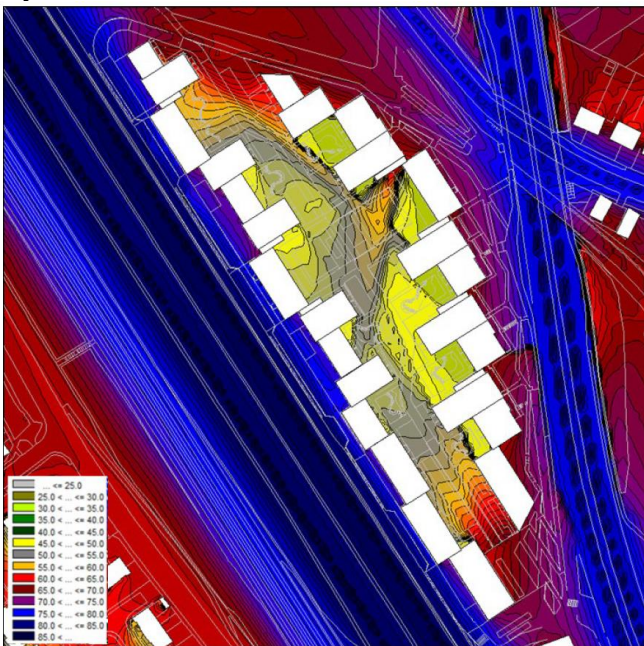


Figure 6.3: Operational (2021) Daytime Noise Levels ($L_{Aeq,16hour}$) at 1.5m

Figure 6 – Operational modelled noise contours night time (2021)

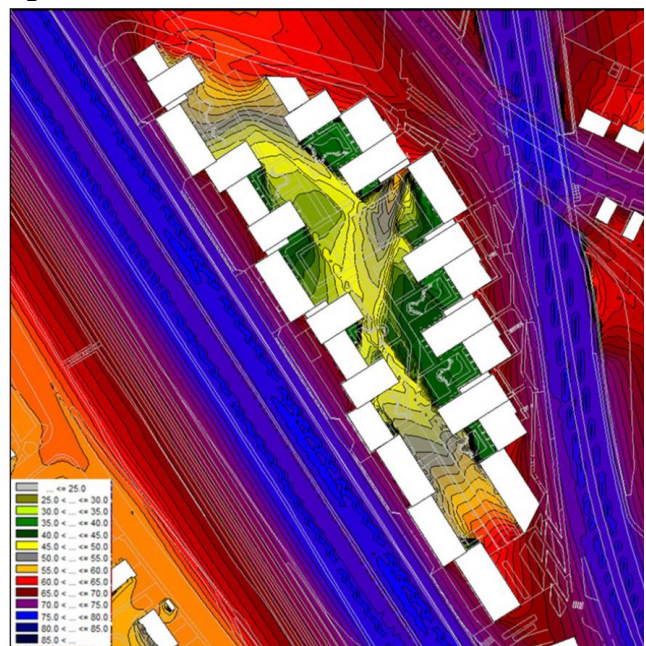


Figure 6.4: Operational 2021 Night-time Noise Levels ($L_{Aeq,8hour}$) at 4m

212 The applicant's modelling of the completed development shows that noise levels of between 74dB and 65dB are predicted on the building elevations facing the M1, with noise levels of between 70dB and 65dB expected on elevations facing the A1. In terms of Barnet's SPD noise thresholds, the applicant's noise modelling shows that noise levels alongside the A1 and M1 would be considered 'high' and alongside Block A, with levels within the internal courtyard generally reduced to 'negligible' or 'low' levels. This modelling is shown below in Figures 7 and 8.

Figure 7 – Daytime noise risk assessment in line with SPD classifications

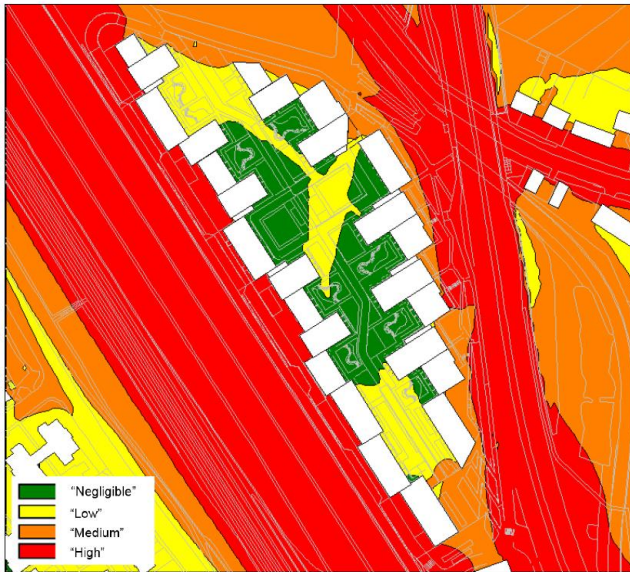


Figure 7.1: Daytime "Noise Risk" Assessment (in line with SPD Classifications)

Figure 8 – Night time noise risk assessment in line with SPD classifications

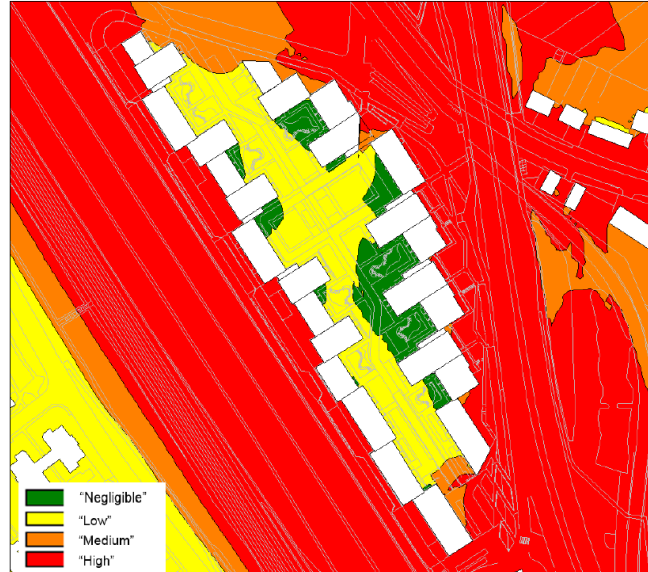


Figure 7.2: Night-time "Noise Risk" Assessment (in line with SPD Classifications)

213 Landscape mitigation is proposed along the M1 and A1 in the form of tree planting, acoustic timber fencing, green walls and shrub planting. As set out above under private amenity space, winter gardens are proposed where building facades are expected to be above the 55 dB standard in Barnet's SPD. Additional mitigation is proposed through the use of solid balustrades and balcony undersides to reduce noise and vibration levels. Roof level communal amenity spaces would also include two metre high glazed acoustic screens alongside planting.

Internal noise levels within residential units

214 Noise intrusion into the proposed flats would be controlled by a combination of mitigation measures including: sound insulation in the form of 450 mm thick external walls including an outer 150 mm pre-cast concrete panel with internal metal studwork and dense plasterboard and high performance acoustic double glazing throughout, which would be set at a higher specification where windows face the M1 and A1. As opening windows would undermine the proposed noise mitigation but also in terms of air quality, the scheme proposes an alternative means of ventilation via a mechanical ventilation and heat recovery (MVHR) system serving all of the residential blocks. This system would draw in fresh air from the internal courtyard elevations of the buildings. For the reasons set out under air quality, all windows facing the A1, M1 and on all sides of Block A would be permanently sealed, to control levels of air pollution. These mitigation measures would be secured by condition.

215 The applicant's Noise Impact Assessment (2019) states that, once the above mitigation measures are taken into account, noise levels within residential units would be limited to be below 35dB during the day time and 30 dB during the night time. This accords with recommended maximum guidelines set out in the WHO/British Standards.

Vibration

216 The applicant's noise and vibration assessments considers vibration impacts associated with the site's proximity to the Midland Mainline Railway and concludes that, as the site is 65 metres from the trainline it is not likely to experience significant adverse impacts in terms of ground-borne vibration. Furthermore, the applicant has stated that the proposed buildings would be built using concrete framed construction with full density concrete slabs, with the proposed external fabric

comprising pre-cast concrete and masonry materials in order to minimise vibration. This assessment is acceptable and, subject to the buildings being constructed in this manner, GLA officers do not consider that the proposed residential units are likely to be exposed to adverse levels of vibration.

Conclusion - noise and vibration

217 Through good acoustic design, sound insulation and noise mitigation measures, the residual noise levels expected both within internal residential units and external private, communal and public amenity spaces would comply with the relevant standards set out in Barnet's Sustainable Design and Construction SPD and an acceptable noise environment would be achieved as part of the scheme. Subject to the above conditions being met, GLA officers consider that the application complies with the requirements of the NPPF, London Plan Policy 7.14, Policy D13 of the draft London Plan, Barnet Local Plan Policy DM04 and the requirements of the adopted Planning Brief.

Urban design

218 The NPPF (at paragraph 124) states that good design is a key aspect of sustainable development. Paragraph 127 of the NPPF sets out a number of high level design objectives for new development, including the need to optimise the potential of a site; provide appropriate and welcoming layouts and landscaping; good architecture; establish a strong sense of place; and be sympathetic to local character while not preventing or discouraging appropriate change. Paragraph 130 of the NPPF states that permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions.

219 Chapter 7 of the London Plan and Chapter 3 of the draft London Plan includes a range of design principles and requirements which apply to new development and are set out within specific policies on: inclusive design (London Plan Policy 7.2/ draft London Plan Policies D3 and D5); designing out crime (London Plan Policy 7.3/ draft London Plan Policy D10); local character (London Plan Policy 7.4/ draft London Plan Policy D1); public realm (London Plan Policy 7.5/ draft London Plan Policy D7); architecture (London Plan Policy 7.6 and draft London Plan Policy D2); tall and large scale buildings (London Plan Policy 7.7 and draft London Plan Policy D8); heritage assets (London Plan Policies 7.8 and 7.9 and draft London Policies HC1 and HC3).

220 Barnet Local Plan Policy CS5 seeks to ensure that development in Barnet respects local context and distinctive local character to create places and buildings of a high quality design. It states that development should protect important local views, protect and enhance Barnet's heritage assets and enhance the borough's high quality suburbs and identifies locations which may be appropriate for tall buildings (defined as being of 8+ storeys or 26 metres+ in height). Further development management policies are provided by Local Plan Policies DM01 (Protecting Barnet's character and amenity), DM02 (Development standards), DM05 (Tall buildings) and DM06 (Barnet's heritage and conservation), together with additional planning guidance set out in the Council's Residential Design Guidance SPD and Sustainable Design and Construction SPD.

221 The Pentavia Retail Park Planning Brief sets out a number of urban design objectives for the site, which seek to ensure the sustainable higher density mixed use redevelopment of the site in a way which addresses the site's constraints in terms of its environmental context, site access, permeability, accessibility and topography. The Brief supports the provision of an innovative and exemplary design that helps to re-integrate the site with surrounding areas and screen it from the M1 and A1, including a clear aspiration for a new pedestrian and cycle access onto Bunns Lane. It states that the development of the site should form an appropriate relationship with the immediate surrounding residential areas in terms of height, massing, landscaping, privacy and overlooking and avoid the height and massing appearing overbearing on the skyline or nearby conservation areas,

taking into account the slightly raised topography of site in relation to some of the surrounding residential areas.

222 Barnet's first reason for refusal specifically addresses design and stated that the proposed application should be refused due to the "excessive height and scale of the development would represent an over development of the site resulting in a discordant and visually obtrusive form of development that would fail to respect its local context and the pattern of development within the surrounding area, to such an extent that it would be detrimental to the character and appearance of the area." Barnet Council's planning officers therefore concluded that the application would be contrary to Local Plan policies CS, CS5, DM01 and DM05; policies 3.4, 7.4, 7.6 and 7.7 of the London Plan; and the adopted Pentavia Retail Park Planning Brief.

223 GLA planning and design officers have been involved in the development of the layout, design and massing of the scheme from an early stage, through pre-application meetings and the Mayor's initial Stage 1 consultation responses, both on the current application and the previous withdrawn application (LPA ref: 16/6420/FUL and GLA ref: D&P/3756). The current scheme has evolved in response to comments made through this iterative process of design scrutiny, pre-application advice and public consultation.

224 Following the Mayor's decision to take over the determination of the application on 5 November 2018, the amended scheme was subject to an independent design review on 6 February 2019, which was undertaken by the Mayor's London Review Panel, with panellists drawn from the Mayor's team of Design Advocates (MDAs). A summary of the key points raised by the London Review Panel is provided above.

Layout, landscaping and public realm

225 The layout of the development is primarily driven by the site's immediate surroundings and challenging environmental context adjacent to the M1, A1 and Midland Mainline Railway. A total of 18 residential blocks are proposed, which would be arranged in a staggered sequence to form two long 'barrier blocks' alongside the site's boundary with the M1 and A1. This overarching design strategy seeks to enclose and shelter an internal public courtyard and prevent the ingress of noise and air pollution associated with the major roads and railway and accords with the principle aims of the Planning Brief.

226 The internal public courtyard would be connected by 'Mill Hill Walk' which would comprise a pedestrian and cycle friendly 'shared space', with vehicle access restricted via site management and limited to essential deliveries, refuse collection and car club vehicles. A network of secondary pathways are proposed around the edge of squares adjacent to residential blocks which would provide access to communal core entrances. These entrances are well distributed along the internal facing blocks within the scheme in order to generate activity and are located in legible and accessible locations. To provide immediate access to the A1 and 113 bus route, residential blocks on this side of the scheme are provided with secondary residential core entrances.

227 Active frontages would be provided along the inward facing elevations of the blocks adjacent to the public courtyard. This would comprise units in commercial, community and ancillary residential use, as well as ground floor flats with their own individual private amenity spaces. Boundary landscaping would be provided in the form of hedge planting to provide privacy for units and ensure a clear distinction is made between public and private space, helping to contribute to a sense of ownership.

228 The two main entrances to the site from the north and south are particularly important in terms of legibility and active frontages, given the site access constraints, topography and inward facing design of the scheme. GLA officers consider that these approaches have been suitably

addressed in the revised application, following the iterative process of design revisions described below, and taking into account the requirements set out in the Mayor's initial consultation response at Stage 1 in March 2018.

229 Since this time, the applicant has acquired land to the north which enables the provision of a significantly improved primary pedestrian and cycle link to Bunns Lane. This would comprise a direct 3.5 metre wide stepped route, alongside a step-free route with three switch backs, which would be 2.5 metres wide and at a shallow 1:21 gradient, suitable for wheelchair users and those pushing children in buggies. This approach would be set within landscaping and overlooked by the adjacent residential blocks within the scheme. Previously, due to ownership issues, this access was hidden at the rear of Blocks K and H facing the A1, which was not considered appropriate in terms of its location and design

230 Following the Mayor's decision to take over the determination of the application, GLA officers have worked with the applicant to further improve the design quality of the proposed northern site access from Bunns Lane in terms of its legibility and attractiveness. In line with the GLA's design advice, the applicant has increased the width and alignment of this route to ensure that a clear and direct view into the courtyard from Bunns Lane would be provided via a double height arched walkway located between Blocks M and K. This is considered to be a significant improvement on earlier versions of the application in terms of access, orientation and wayfinding, particularly for non-residents, and ensuring a stronger integration is formed with the surrounding area to the north. Importantly, this has also been achieved without compromising the overarching strategy to control the ingress of noise and air pollution, which is welcomed. The internal archway route would be overlooked by a restaurant/cafe unit on one side and an ancillary residential floorspace which is expected to accommodate a resident's gym.

231 Access to the south is also challenging given the change in levels at this location (5m) between the site entrance and podium level of the public courtyard. Consequently, this entrance to the site would also require a combination of steps, ramp and lift access. The base of the 16 storey Block A would be activated at street level by a convenience food store, with double height glazing provided to provide overlooking of this 5 metre wide stair case, with additional overlooking provided by residential units above on both sides. As a result of the gradients involved and the requirement for different forms of access, the initial section of the step-free approach route onto Mill Hill Walk would comprise brick façade on both sides for a relatively short section. To resolve this issue, the applicant has responded to design advice from the GLA by providing glazing facing onto this walkway at lower ground floor level serving the adjacent ancillary residential unit. This unit is expected to accommodate a 24 hour concierge and site management facility, which would provide appropriate levels of security. Whilst under normal circumstances, this site access would be wider and benefitting from additional landscaping, this is particularly constrained in this instance due to the need for the scheme to effectively mitigate noise and air pollution levels and shelter the central courtyard.

232 In terms of the proximity of blocks to the adjacent highways, the buildings would be set back between 19 metres and 32 metres from the A1 and between 13 metres and 23 metres from the M1. Blocks facing the A1 would be slightly offset and angled away from the A1 and buffered by landscape screening, with finished floor level of ground floor units raised approximately 2 metres above that of the existing road. The M1 carriageway is on slightly lower ground, approximately 1.5 metres below the existing level of the site. Ground floor level residential units on this side of the scheme would be raised approximately 7 metres above the level of the highway at podium level, above the lower ground floor car park. Additional landscaping and acoustic fencing is proposed alongside this boundary and would be secured by condition and obligation. In line with the GLA's design comments at Stage 1, access to the service road adjacent to the M1 would be effectively restricted via on-site management, electronic gates/bollards to ensure this remains private,

Landscaping and public realm

233 The applicant's landscape strategy proposes a range of lawns, herbaceous planting areas, play space, tree planting, hard landscaping and water features within the central courtyard. Landscaping screening is proposed alongside the A1 and M1 in the form of tree and hedge planting and acoustic timber panel fencing. Overall, the scheme provides a generous public realm offer comprising a range of well-considered public, private, communal landscape amenity areas distributed, complimented by extensive soft landscaping, in line with the objectives of London Plan Policy 5.10 and Policy G5 of the draft London Plan. The planting and landscaping proposals onsite will help to further mitigate microclimate impacts, such as noise and air quality address urban greening objectives and contribute towards significantly improving the biodiversity and ecological value of the site which is identified as being in an area of wildlife and open space deficiency. The impact of the development on trees and urban greening is addressed in more detail under the relevant sections below.

234 Further details of planting, hard surface treatments and greening, as well as their on-going management and maintenance would be secured by condition to ensure that the landscaping and public realm proposals are implemented and a high quality setting for the proposed buildings and new public routes is delivered. In addition to this, a Section 106 obligation would be secured to ensure that the acoustic boundary landscaping is delivered prior to the occupation of any residential units and requires and that the proposed areas of public open spaces, public realm and routes would be maintained.

MDA design review

235 As set out above, the MDA design review panel questioned whether there are successful precedents of schemes of this size which comprise two large super blocks surrounding a long central public space and whether alternative layouts have been fully considered, for example a layout of smaller buildings within a tighter street pattern. In light of these concerns, the panel stated that further incontrovertible evidence is needed to demonstrate that the applicant's proposed internal facing block layout is required to resolve air quality and noise issues. The panel also flagged the importance for the development to connect to the surrounding movement network, given the island nature of the site and, in particular, for the development to create a stronger relationship with residential area to the north of the site.

236 Whilst the central public courtyard would be of a significant length, GLA officers consider that the layout and design of the courtyard and the facing blocks has been effectively refined to ensure that the space is broken up into a sequence of visually linked squares. This has been achieved by staggering and slightly recessing the arrangement of the proposed linear and right angled blocks to ensure that they appropriately enclose and define individual landscaped squares within the courtyard. The largest of these spaces would be located in the centre of the scheme and would comprise a rectangular square measuring approximately 72 metres by 37 metres in size and include a water feature and pergola, with other courtyard spaces of a smaller size. This space would contain the majority of commercial uses and link to the new access on Bunns Lane, so would provide an appropriately active central space within the development. With a tighter layout and urban form achieved in other smaller squares, ranging from 21 metres to 54 metres in length and width.

237 As set out elsewhere in this report, the applicant has submitted a Noise Impact Assessment and Air Quality Assessment which robustly demonstrates that the inward facing layout and construction of long 'barrier' blocks adjacent to the A1 and M1 is necessary as an effective screening device to shelter the scheme from noise and air pollution and to ensure that an acceptable amenity and environment is provided for future residents within the scheme.

Furthermore, whilst it would not normally be desirable for a scheme of this size to be inward facing, the site is cut off from the surrounding neighbourhoods by the major roads and consequently, given the immediate context, the proposed layout does not risk creating a sense of spatial separation or severance, as this is to some extent inherent with the redevelopment of a site such as this.

238 The applicant has also provided further information setting out in more detail the design evolution of the scheme. This sufficiently demonstrates that a range of layout options have been considered, which were subject to design scrutiny with GLA and LB Barnet officers. Various iterations of a scheme comprising a tighter street pattern and lower rise perimeter blocks ranging in height from 4 to 9 storeys (as suggested by the MDAs) was considered and subject to pre-application meetings with GLA and LB Barnet Council officers. However, this option was not progressed further due to concerns about the separation distances between blocks and daylight and sunlight issues. An alternative proposal comprising a more curvilinear layout and built form was then developed by the applicant which included a more generous circular public space in the centre of the scheme. This proposal was the subject of a planning application (LPA Ref: 16/6420/FUL) but was withdrawn. As set out above, GLA officers have been involved in this development of the layout and design of the scheme and consider the current proposal to represent a significant improvement on the previous proposals.

Conclusion – layout, landscaping and public realm

239 The proposed design and layout would optimise the development capacity of the site whilst responding appropriately to the site's immediate environmental and site access constraints and the principle aspirations and objectives outlined in the Council's adopted Planning Brief. GLA officers also consider that the potential for the site to integrate with the surrounding area has been maximised given the existing site constraints and consider that the new access routes, public realm and landscaping proposed would be of a high quality, providing a welcoming and attractive environment, which would be well-overlooked and benefit from an appropriate levels of activity and ownership. As such, the application accords with the policy context set out above.

Height and massing

Tall buildings policy

240 London Plan Policy 7.7 states that tall buildings⁴ should be part of a plan-led approach and not have an unacceptably harmful impact on their surroundings. In terms of location, Policy 7.7 states that tall buildings should be generally limited to the Central Activities Zone, opportunity areas, and areas of good access to public transport but leaves scope for tall buildings to be considered in other locations outside of these areas, subject to urban design analysis and compliance with the criteria set out in Policy 7.7. To accord with this criteria, tall buildings should:

- be located in areas whose character would not adversely be affected;
- relate well to the surrounding buildings, urban grain and public realm, particularly at street level; improve the legibility of an area and enhance the skyline;
- incorporate the highest standards of architecture and materials;
- provide active ground floor activities that provide a positive relationship to the surrounding streets;
- contribute to improving the permeability of the site and wider area, where possible;
- incorporate publicly accessible areas on the upper floors where appropriate;
- make a significant contribution to local regeneration;

⁴ Tall buildings are defined in paragraph 7.25 of the London Plan as buildings that are substantially taller than their surroundings or cause significant change to the skyline.

- not adversely affect their surroundings in terms of microclimate, wind, overshadowing, noise, glare, or give rise to interference with aviation or telecommunication infrastructure; and
- not adversely impact local or strategic views.

241 This policy approach is broadly carried forward in Policy D8 of the draft London Plan, which states that applications for tall buildings that are referable to the Mayor should be subject to design review and encourages boroughs to proactively identify locations where tall buildings will be considered suitable.

242 Barnet's Local Plan Policy CS5 identifies a number of strategic locations within the borough where tall buildings may be appropriate and states that proposals for tall buildings (8 storeys/26 metres in height and more) outside of these specific locations will not be supported. The nearby Regeneration Area at Colindale and Grahame Park Estate are listed as strategic locations which are considered suitable for tall buildings; however, the application site does not fall within these strategic locations. This local policy framework was informed by a borough wide characterisation study (2011) and tall buildings study (2010). The northern part of the site lies close to the designated 'Viewing Corridor A, from Mill Hill Field (the Ridgeway) towards Harrow on the Hill, which is identified as an important local view in Barnet's Local Plan Core Strategy.

243 As well as reiterating a general presumption against tall buildings being located outside the strategic locations identified in the Core Strategy, Barnet's Local Plan Policy DM05 sets out the following criteria which proposals for tall buildings would need to comply with:

- provide an active street frontage where appropriate;
- successfully integrate into the existing urban fabric;
- have regard to topography and not have an adverse impact on Local Viewing Corridors, local views and the skyline;
- not cause harm to heritage assets and their setting; and
- ensure potential microclimatic effect does not adversely affect existing levels of comfort in the public realm.

244 The Council's Pentavia Retail Park site brief confirms that, in view of the site's location, applications for tall buildings of 8 storeys or more in height will not be supported on the site. It notes that topography of the area means that most forms of development on the site are likely to be highly visible from the surrounding residential areas, which include the Watling Estate Conservation Area (on lower land to the west) and Mill Hill Conservation Area (on higher land to the north-east). The Planning Brief states that the height, mass and bulk of the development should avoid having an adverse or excessively dominant impact on the neighbouring residential areas, conservation areas, Local Viewing Corridor A and the Barnet skyline and avoid impacting the operation of the nearby UCL Observatory.

Tall buildings and massing assessment

245 The application proposes 18 blocks with buildings of varying heights ranging from 4 to 16 storeys, as summarised in Table 1 on page 14. In line with Barnet's Local Plan Policy CS5 and DM05, all of the buildings proposed would be considered to be tall buildings, apart from those within Blocks M, P and R, which are closest to Bunns Lane. The tallest building proposed would be located at Block A to the south at 16 storeys, which would be double the applicable maximum height threshold set out in the Local Plan for this type of location.

246 As set out in paragraph 222, Barnet Council's first reason for refusal of the application specifically addresses height and scale of the development, which Barnet Council considered to be excessive in this location and context and detrimental to the character and appearance of the area and representing the overdevelopment of the site. Consequently, Barnet Council concluded that the

application would be contrary to Barnet Local Plan Policies CS, CS5, DM01 and DM05, and Policies 3.4, 7.4, 7.6 and 7.7 of the London Plan and the adopted Pentavia Retail Park Planning Brief. GLA officers also note that a significant number of objections have been submitted in relation to the height, scale and visual impact of the proposed development and the degree to which the proposals would accord with the policy framework and planning brief described above.

247 As set out above, the site does not fall within any of the strategic locations identified in Barnet Council's Local Plan as potentially suitable for tall buildings and therefore represent a departure from Barnet's Local Plan, as well as the adopted Planning Brief, albeit London Plan Policy 7.7 sets out a broader and less spatially prescriptive policy framework for assessing the suitability of tall buildings in other locations. As such, the application represents a departure from the Barnet Local Plan. An assessment of the application in accordance with the criteria set out in Policy DM05 and London Plan Policy 7.7 is provided below.

248 A townscape and visual impact assessment (TVIA) has been undertaken as part of the applicant's Environmental Statement which includes accurate visual representations of the proposed development from 21 key views, which were agreed between the applicant and Barnet Council and are considered appropriate. GLA officers are satisfied that the applicant's TVIA has presented accurate views from all relevant vantage points to enable a full assessment of the proposals and their impact.

Criteria (i) an active street frontage where appropriate:

249 Active frontages would be provided along the inward facing elevations of the blocks adjacent to the public courtyard and overlooking the key entrances to the site to the north and south, as set out in detail in the above section on layout, landscaping and public realm. Moreover, car parking, refuse and cycle stores which normally create dead frontages at ground level have also been successfully located at lower ground floor level. The slip road adjacent to the M1 would not be activated at lower ground floor level which is appropriate given its location and function as a service road and access route to the car park. This route would be appropriately managed to ensure that it functions as a private route and consequently active frontages would not be appropriate here. Building elevations facing the A1 would include residential units at ground floor level and secondary communal core entrances. These units would not be provided with private amenity space at ground level due to noise and air quality issues, which is acceptable given these constraints. As such, the application complies with this criterion.

Criteria (ii) successful integration into the existing urban fabric; and Criteria (iii) a regard to topography and no adverse impact on Local Viewing Corridors, local views and the skyline:

250 Whilst the application site is spatially dislocated from the surrounding residential areas by the M1 and Midland Mainline Railway to the west and the A1 to the east, the site occupies a potentially a sensitive location for tall buildings due to its elevated level at between 62 and 69 metres AOD in relation to lower lying surrounding areas to the south and west, which fall to approximately 30 metres AOD. In contrast, towards Mill Hill, the topography rises to the north and east to a high point of 120 metres AOD at Mill Hill Field. The northern part of the site lies close to the designated 'Viewing Corridor A, from Mill Hill Field towards Harrow on the Hill, which is identified as an important local view in Barnet's Local Plan Core Strategy.

251 The applicant's TVIA assesses the potential visual impact of the development on the view from Mill Field looking south west towards the site from the high point on the Ridgeway, which is a locally important view in Barnet's Local Plan (View A) towards Harrow on the Hill. The existing character of the view is defined by the immediate landscape/parkland setting and its visual contrast with the urban and landscape elements found in the backdrop of the view of the skyline, which

includes a number of tall buildings located in Colindale, Edgware and Hendon, as well the arch of Wembley Stadium.

252 The applicant's TVIA demonstrates that the upper section of the tallest blocks within the scheme would be visible in the central middle ground of this view of the skyline but would not obscure or detract from the view of Harrow on the Hill or Wembley Stadium. Furthermore, Block A would not appear noticeably taller than other tall buildings which are visually prominent on the skyline. Moreover, the varied and undulating massing of the scheme, as well as the articulated elevations of the blocks and cohesive architectural appearance would be appreciable at this distance, blending in with the overall character of the view and providing additional visual interest to the skyline. As such, GLA officers consider that the development would not have any material adverse impact on this view. GLA officers note that Barnet Council officers have also concluded that the development would not harm or detract from the intrinsic value of this view.

253 In addition to this, the applicant's TVIA includes visualisations of views from Mill Hill Park (Views 2 and 9) and from Woodcroft Park (View 10), which are not designated views or located within conservation areas, but are important given the surrounding topography and the visibility of the scheme from these public open spaces.

254 View 2 is taken from Mill Hill Park close to the entrance from Wise Lane and demonstrates that the upper sections of a number of the buildings would be visible above the existing tree line along the southern edge of the park adjacent to the A1, albeit the majority of the development would be screened from view by this landscaping, particularly during the summer months of the year when trees would be full of leaves. Barnet Council officers considered the development would have a significant and unacceptably harmful impact on the context and setting of the park.

255 Having reviewed the TVIA and visited the location of the view during site visits, GLA officers do not consider that the development would appear overbearing or excessively dominant in this view given the distance of the site from this location and the existing landscape screening. Whilst the wider context of the park would be altered by development which would be visible in the backdrop of the view behind the existing treeline boundary, the varied height and massing of the blocks and the generally unified architectural appearance, including the distinctive light grey stone frame and darker brick cladding, would ensure that these visible taller elements of the development would have an attractive and cohesive appearance which would contribute to the visual enclosure and setting of the park and the appreciation of the topography and urban context. As such, GLA officers consider that there would be no harm to the context or setting of the park.

256 View 9 is taken from the other side of Mill Hill Park west of the A1 bridge structure and demonstrates that the development would be more visible from this location with a group of taller buildings clearly visible rising above the trees and residential properties at Churchill Place. Barnet Council officers considered the impact of the scheme to be overwhelming and wholly alien and incongruous in this context, which would have a significantly adverse impact on the intrinsic value of this local view.

257 The existing character of this view is defined by the openness and sloping topography of the parkland and the trees lining Flower Lane, the A1 and Cranberry Close; however, a number of urban elements are appreciable at this location, including the A1 and three storey new build properties along Bunns Lane. Furthermore, having visited this view point location, GLA officers consider the views to be kinetic. They observed during site visits that a number of taller buildings in the distant urban hinterland towards Colindale and the Grahame Park Estate are visible from various points at the top of Mill Hill Park in this location. Whilst the development would be visually prominent from this location, marking a clear departure from the prevailing height and architectural appearance, the design and materiality of the scheme has been well-considered to ensure that, overall, the development would have a positive townscape impact. In marked contrast with the previous

withdrawn application (LPA Ref: 16/6420/FUL), the height of development would be appropriately stepped down in height towards Bunns Lane and the overall massing would be broken up, with taller elements staggered in their placement to provide visual interest and a contrasting but visually pleasing and cohesive palate of materials proposed.

258 GLA officers note that Barnet Council's planning committee report states that the visual impact of the scheme when viewed from Bunns Lane and Flower Lane would represent a harmful imbalance in terms of height and scale and thereby fail to integrate with the existing urban fabric. View 7 of the TVIA is taken from the opposite 93 Bunns Lane looking south towards the site. This demonstrates that only a small upper section of the adjacent blocks would be visible from this location, with substantial screening provided by the retained sections of the existing tree belt. Furthermore, the TVIA shows that the visible elements of the block would be read at broadly the same height as the existing new build properties on Bunns Lane. View 8 of the applicant's TVIA is taken from Flower Lane and shows that the upper sections of a number of the proposed residential blocks would be visible from this locations rising above the roofscape of the existing three storey new build properties on Bunns Lane, albeit the application would be substantially screened from view by these properties and due to the topography and distance.

259 Having regard to the TVIA and the existing context, GLA officers consider that the massing, scale and architectural appearance of the development when viewed from these locations would not give rise to any material harm and where elements of the development would be visible, the architectural design and high quality materials proposed would ensure that blocks would have a distinctive and cohesive appearance, helping to contribute to and respond positively to the character of the surrounding area.

260 In terms of integration with the surrounding residential area to the east of the A1, Views 4, 5 and 20 are taken from various locations along Bunns Lane and View 3 is taken from Parkside and demonstrate that the upper sections of the proposed buildings would be visible from these locations rising above the existing rooflines of properties. GLA officers note that Barnet Council's planning report consider that the height of the development when viewed from these locations to be incongruous in this context and would harm and fail to integrate with the existing urban fabric.

261 Whilst the upper sections of the proposed buildings would be noticeable from these locations, the majority of the lower sections of the blocks would be substantially screened by the residential properties and trees in the immediate vicinity of views. Furthermore, due to the distance between these locations and the undulating topography, the blocks would appear recessive and form part of the more distant urban context. Moreover, the proposed scale, varied massing and cohesive architectural appearance of the buildings as a group would ensure that they form an attractive and distinctive backdrop to the more suburban context found within the more immediate environment. As such, GLA officers do not consider that the application would materially harm the suburban character or fail to integrate with the local context in this location.

262 GLA officers consider that the application would appropriately integrate with the existing urban fabric found to the west of the site, taking into account the visibility of the proposed buildings as shown in TVIA views, the existing context, as well as the substantial severance effect created by the M1 motorway and Midlands Mainline Railway and the distance of the site.

263 Overall, GLA officers consider that the application accords with criteria ii and iii of Policy DM05, as set out above.

Criteria (iv) not cause harm to heritage assets and their setting:

264 The impact on the significance of heritage assets is considered to be acceptable and the application would not harm the significance of heritage assets. This is outlined in a detailed assessment provided under 'heritage' below.

Criteria (v) ensure that the potential microclimatic effect does not adversely affect existing levels of comfort in the public realm:

265 A wind microclimate study has been carried out to assess the existing wind conditions at and around the site and to assess the wind conditions that would occur with the introduction of the new development and associated landscaping, taking into account the industry standard Lawson criteria for pedestrian comfort and safety. This assessment shows that wind conditions in and around the site would be suitable in terms of pedestrian safety and comfort and the development would not adversely affect existing levels of comfort in the public realm, in accordance with this criterion of Barnet's Local Plan Policy DM05.

Impact on the Green Belt

266 Barnet Council Local Plan Policy DM15 states that development adjacent to the Green Belt should not have a detrimental impact on visual amenity and should respect the character of its surroundings. Mill Hill Park to the north is designated Green Belt and although the site would be buffered by existing residential properties on Bunns Lane and Cranberry Close, as well as the adjacent industrial sites and tree lined embankment, GLA officers have considered the impact of the proposed development on the visual amenity and local character of the Green Belt and the surrounding residential area, in line with Policy DM15 a vi). Having regard to the applicant's submitted TVIA, the topography of the site and surroundings and the degree of screening provided by the residential and industrial properties described above, GLA officers consider that the character and visual amenity of the adjacent Green Belt and surroundings would not be detrimentally harmed by the proposed development and the key features of the local visual character and amenity would not be materially impacted by the application. For the avoidance of doubt, the application would not trigger the requirements of the NPPF paragraph 144, as there would be no impact in terms of openness or the other key purposes of the Green Belt.

London Plan Policy 7.7

267 Turning to the criteria set out in Policy 7.7 of the London Plan, whilst the site is outside the broad spatial areas normally considered appropriate for tall buildings, in relation to location, PTAL and proximity to nearby town centres, these are not prescriptive requirements of the policy. GLA officers consider that there are strong material planning considerations which in this particular instance justify the provision of a tall and large buildings in this relatively isolated and under-utilised brownfield site, which are set out below.

268 Firstly, the surrounding topography and segregated nature of the site would mean that the character of the surrounding area would not be materially adversely affected by the proposals, nor would the application adversely affect local or strategic views, the skyline or the significance of heritage assets, as set out in more detail above and under heritage section of this report. Secondly, the provision of taller buildings in this instance provides a number of important planning benefits, both in terms of viability and affordable housing delivery, helping to fully optimise the potential housing capacity of the scheme. Were the development limited to eight storeys, the potential for housing and affordable housing delivery would be reduced. Thirdly, GLA officers are satisfied that the proposed layout, design, architectural approach and the proposed high quality facing materials would ensure the provision of a high quality scheme in accordance with the criteria set out in Policy 7.7 and that the application would not adversely affect the surrounding area in terms of

microclimate, wind, overshadowing, noise, glare, aviation or telecommunication interference, subject to detailed conditions being attached in relation to these matters.

Conclusion - height and massing

269 On balance, taking into account the above policy framework, the site's location and impacts and the degree to which the scheme is considered compliant with the design criteria set out above, GLA officers consider that the proposed height and massing of the development is acceptable in this instance. As such, GLA officers consider that there are material considerations to justify a departure from Barnet's Local Plan Policies CS5 and DM05 on tall buildings, as set out in more detail in the conclusion of this report. GLA officers are also mindful that there are precedents for Barnet Council having accepted the principle and acceptability of tall buildings outside of the 'strategic locations' identified in the Barnet Local Plan, where proposals have been assessed against the criteria in Policies DM05 and 7.7 and considered acceptable, for example, Homebase, Rookery Way, NW9 6SS (LPA reference: H/05828/14; GLA reference: D&P 3223), which comprised a 14 storey building.

Detailed design and architecture

270 London Plan Policy 7.6 requires buildings to be of the highest architectural quality and comprise materials which complement rather than necessarily replicate local architectural character. Barnet Local Plan Policy DM01 states that development should represent high quality design and be based on an understanding of local characteristics.

271 Following the MDA design review in February 2019, the applicant has made further revisions to simplify the architectural approach by removing green glazed brick panels and by introducing darker brickwork tones, which helps to avoid visual confusion and respond more to the surrounding local context. These architectural changes have been made alongside revisions to the height and massing of the scheme respond positively to the MDA panel and GLA's comments.

272 As set out under design and layout, the scheme proposed effectively two building typologies – inter-locking L-shaped blocks and more linear tower buildings - which are laid out in a staggered and repetitive sequence to frame the internal public courtyard. Whilst the MDA panel expressed some concerns over the limited number of facade typologies utilised in the scheme, GLA officers consider the revised architectural approach and materials palette, in combination with the staggered layout and more refined height and massing of the development, would ensure the scheme has a sufficiently varied, coherent and visually interesting architectural appearance which responds appropriately to local context.

273 Taller linear tower buildings would be well-articulated vertically and horizontally through the use of light grey stone frame providing simple grid structure, which would be complemented by vertical beige brickwork columns and horizontal bronze metal panels, as well as projecting winter gardens. The upper sections of the buildings would be visually emphasised by recessing the top two levels to reveal a more open stone frame structure and by providing additional glazing.

274 The projecting elements of the right angled blocks facing onto the internal courtyard would also comprise the same light grey stone frame grid structure, but with contrasting beige yellow and dark brown brick tones provided to emphasise different building facades and provide a varied and cohesive character would be achieved. A range of private amenity spaces, including projecting dark metal balconies and winter gardens and recessed balconies would also contribute to generating a distinctive sense of place along Mill Hill Walk.

275 To ensure that these features are delivered, conditions are recommended in relation to the detailed design of elevations, facing materials and balconies. Subject to these requirements being

met, GLA officers consider that the scheme would provide a good standard of architecture, which would respond appropriately to the local context, in line with Barnet Local Plan Policy DM01, London Plan Policies 7.4, 7.6 and the NPPF.

Fire safety

276 Policy D11 of the draft London Plan seeks to ensure that development proposals achieve the highest standards of fire safety and to ensure the safety of all building users. In line with this objective, should planning permission be granted a condition would be included to require the submission of a fire statement outlining the measures to reduce fire risk, provide means of escape and ensure access for emergency services.

Designing out crime

277 Policy 7.3 of the London Plan seeks to ensure that the principles of designing out crime are integrated in the design of new development to promote a sense of security without being overbearing or intimidating. The criteria in Policy 7.3 requires new development to provide legible, convenient and well-maintained movement routes and spaces which are well-overlooked and benefit from an appropriate level of activity, with private and communal spaces clearly defined to promote a sense of ownership. Similarly, Barnet Council Local Plan Policy CS12 requires developers to incorporate design principles which contribute to community safety in all new development and Policy DM02 seeks compliance with Secured by Design.

278 As set out above under 'design and layout', the provision of active frontages has been maximised within the scheme, with ground floor units in commercial, community and ancillary residential floorspace lining the proposed public courtyard to provide appropriate levels of overlooking and activity during the day and evening. A condition is recommended to ensure that glazing within the proposed commercial, community and ancillary residential units is visually permeable and not obscured or blanked by advertisements or roller shutters, in the interests of designing out crime and encouraging overlooking. Ground floor residential units facing the internal courtyard and Bunns Lane would also be provided to generate natural surveillance and provided with well-defined private amenity spaces which would be wrapped by boundary landscaping in the form of hedge planting to provide a clear distinction between public and private space. Further details of these landscaped boundaries would be required by condition.

279 Whilst the scheme is inward facing in terms of its layout and design, with lower levels of active frontages proposed alongside the A1 and M1, this is appropriate and acceptable in this particular instance, given the requirement for the development to respond to the associated noise and air pollution levels. The two key entrances to the site are particularly important in terms of designing out crime and natural surveillance, and GLA officers are satisfied that the approach proposed is appropriate with the potential for active frontages maximised along these routes, taking into account the site constraints, as set out in more detail in paragraphs 225-232. The western service road adjacent to the M1 would also be managed appropriately to ensure that vehicle access to the lower ground floor car park is restricted and ensure that the proposed pedestrian and cycle route is subject to CCTV surveillance. Further details of the proposed management approach to this and other public routes within the scheme would be secured by condition. As part of the Section 106 agreement, the applicant would be required to bring forward schemes to enhance the quality of key off-site pedestrian and cycle routes via the A1 and M1 underpasses and footbridges which link to the surrounding neighbourhood. These qualitative enhancements would comprise lighting, paint, public art, public realm and masonry/brickwork improvements and would aim to make these routes feel more welcoming and attractive for users in the interests of community safety. As such, the application accords with London Plan Policy 7.3 and Policies CS12 and DM02 of the Barnet Local Plan.

Conclusion on urban design

280 The Council resolved to refuse the application on the grounds of excessive height, scale and massing, overdevelopment of the site and failure to respect the site's local context and harm to the character and appearance of the surrounding area. GLA officers consider that the design, layout and landscaping of the scheme is well-considered and fully optimises the development potential of the site, whilst successfully resolving the environmental and site access constraints associated with the site's proximity to major roads. The potential for the site to integrate with the surrounding area has been maximised given the existing site constraints. Furthermore, the architectural approach and use of a consistent and varied palate of different tones of brick and stone materials would ensure the provision of a high quality, distinctive and cohesive scheme which responds appropriately to the surrounding urban and landscape context, topography, views and historic environment.

281 The proposed tall buildings would, in this location, mark a departure from Barnet's Local Plan Policy DM05. However, having regard to the design criteria for assessing proposals for tall buildings, as set out in London Plan Policy 7.7 and Barnet Local Policy DM05, GLA officers consider that the proposed height and massing of the development is acceptable in this instance, taking into account the site's location, immediate and wider urban and landscape context and the scheme's impact on the surrounding area, local views and nearby conservation areas. Accordingly, GLA officers consider that there are material considerations to justify a departure from Barnet's Local Plan Policies CS5 and DM05 in respect of tall buildings, taking into account the impacts of the scheme and the wider material public benefits associated with the development in terms of the overall and affordable housing delivery and optimising the development of an under-utilised, brownfield site.

282 On this basis, the application accords with London Plan Policies 3.5, 3.6, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, the Housing SPG (2016), Policies D1, D2, D3, D4, D5, D6, D7, D8, D11 of the draft London Plan and generally accords with Barnet Local Plan Policies DM01, DM02, DM03, DM05, CS5 and the overall urban design objectives set out in the Pentavia Retail Park Planning Brief (2016). Where there is clearly a conflict with Barnet Local Plan Policies CS5 and DM05 and the Pentavia Retail Park Planning Brief (2016) in terms of the site's location and the proposal for tall buildings, GLA officers are satisfied that the proposed tall buildings are acceptable and that the other material considerations set out above outweigh the scheme's conflict with the above Development Plan policies and supporting guidance.

Heritage

283 The site does not lie within a conservation area and there are no listed buildings either within or in close proximity to the site. The Watling Estate Conservation Area is 350 metres away to the west and The Mill Hill Conservation Area is approximately 850 metres to the north. GLA officers note that Barnet Council concluded that the development would harm the setting of both conservation areas and the level of harm caused would be significant and would outweigh the benefits arising from the scheme (although this was not stated as a specific reason for refusal). It also noted that as part of the original consultation for the application in January 2018 Historic England raised no objections and advised the Council that the application should be determined in line with national and local policy and guidance, taking into account the Council's specialist heritage advice.

284 The following sections of this report consider the impact of the development on the significance of both conservation areas, having regard to the applicant's TVIA and the statutory duties and local, strategic and national policy tests set out below.

285 In relation to listed buildings section 66 of the act states that all planning decisions should “*have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses*”. In line with Section 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990, planning decisions must also give special attention to the desirability of preserving or enhancing the character or appearance of the conservation areas which may be affected by the proposed development.

286 The NPPF identifies that the extent and importance of the significance of the heritage asset is integral to assessing the potential impact, and therefore acceptability. The definition of significance in this context is the value of the heritage asset in relation to its heritage interest and this may be archaeological, architectural, cultural or historic. It may also derive from a heritage asset’s physical presence as part of the townscape or its setting. The NPPF states that when considering the impact of the proposal on the significance of a designated heritage asset, great weight should be given to the asset’s conservation and the more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting.

287 Where a proposed development will lead to ‘substantial harm’ or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh the harm or loss. Where a development will lead to ‘less than substantial harm’, the harm should be weighed against the public benefits of the proposal, including securing its optimum viable use. The NPPF emphasises that great weight should be given to the conservation of heritage assets (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance. Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification.

288 The Barnwell Manor Wind Farm Energy Limited v East Northamptonshire District Council case tells us that “Parliament in enacting section 66(1) did intend that the desirability of preserving listed buildings should not simply be given careful consideration by the decision-maker for the purpose of deciding whether there would be some harm, but should be given “considerable importance and weight” when the decision-maker carries out the balancing exercise.” The case also makes it clear that there is a strong presumption against granting planning permission that would harm the character and appearance of a conservation area.

289 London Plan Policy 7.8 and Policy HC1 of the draft London Plan state that development affecting heritage assets and their setting should conserve their significance. As set out above, Barnet Local Plan Policy DM05 requires tall buildings such as those proposed in the application to not cause harm to heritage assets and their settings.

The Watlington Estate Conservation Area

290 The Watling Estate Conservation Area comprises a large expanse of inter-war housing comprising two storey demi-detached and terraced houses (and blocks of flats) and is separated from the site by the M1 motorway, the Midland Mainline Railway, Grahame Park Way, Bunns Lane and Woodcroft Park. The significance of the conservation area is primarily derived from its garden suburb layout and relatively cohesive architectural and roofscape character, as well as its social purpose as part of the ‘homes for heroes’ programme. The setting and surroundings of the conservation area does not contribute to its significance.

291 The adopted Watling Estate Conservation Area Appraisal Statement (2007) identifies a number of key views and vistas, including long range views along spine roads such as Watling

Avenue, Deansbrook and Abbots Road and short range views into narrow streets, courtyards and spaces off principle roads. Whilst the Pentavia Retail Park site is on slightly higher land in relation to the Watling Estate Conservation Area, the layout of the estate means that although it includes a number of long streets laid out on a broadly east-west alignment affording long-distances views, very few of these streets allow for direct views towards the site. Furthermore, where streets are orientated towards the site – such as Blundell Road, Deansbrook Road, Homefield Road and Wolsey Grove – the Garden City design principles employed in the design and layout of the estate mean that views are terminated by buildings to achieve a sense of visual enclosure.

292 Having reviewed the applicant's TVIA and undertaken site visit to walk around the conservation area to obtain a fuller understanding of the potential visibility of the development from within the conservation area from kinetic long distance views, GLA officers are satisfied that the development would not give rise to any material impact on any of the key views or vistas identified within the conservation area appraisal, or on the views assessed in the TVIA from within the conservation area (Views 15 and 16⁵), which are from Blundell Road and Goldbeaters Grove respectively.

293 GLA officers also note that Barnet Council's committee report arrived at a similar conclusions to those set out above, but stated that in respect of View 10 of the applicant's TVIA (which is taken from Woodcroft Park facing east), the development would 'dominate views from the edge of the conservation area, to the detriment of its setting to an extent that officers consider unacceptable'. This is despite the fact that this particular view is located outside of the conservation area boundary and faces away from and in the opposite direction to the conservation area.

294 In terms of the potential harm to the significance of the Watling Estate Conservation as a result of impacts upon its setting, GLA officers do not share this view for a number of reasons. Firstly, the overall significance of the conservation area is not derived from its setting, but from the historic, architectural and social factors outlined above. Secondly, whilst the TVIA shows that upper sections of the proposed buildings would be clearly visible from this location within Woodcroft Park looking east, with blocks visible behind Orient Primary School, GLA officers do not consider that a change in this eastern view results in harm to the significance of the Watling Estate Conservation Area or the way this is appreciated.

295 Although Woodcroft Park plays a positive role in defining the eastern boundary of the conservation area and in separating it from Bunns Lane, the Midland Mainline Railway and the M1 motorway, the landscape context it provides can only be appreciated from within the park looking west at the conservation area (in the opposite direction of the site); or from Blundell Road looking north and south along the terraces of properties facing the park. These views would involve looking away from location of the site. As such, GLA officers are of the view that the development would not materially harm either the setting or significance of the Watling Estate Conservation Area.

The Mill Hill Conservation Area

296 The Mill Hill Conservation Area is separated from the site by steeply sloping terrain which falls in gradient from the conservation area boundary to south towards the site. Whilst this topography means that there is the potential for tall buildings on the site to have a visual impact on the conservation area, the actual visibility of the proposed development is limited to a large extent by factors such as landscaping and the layout and orientation of streets and public spaces. The Mill Hill Conservation Area is buffered from the site by two sections of Mill Hill Park either side of the A1, Dawes Lane and a number of residential side streets. To the north-east, the conservation area is separated from the site by the Arrandene Open Space and residential streets south of Wise Lane.

⁵ TVIA View 15 is taken from Blundell Road and View 16 is taken from Goldbeaters Grove

297 The significance of Mill Hill Conservation Area is defined by its village character, topography and landscape setting and layout, as well as the historic and architectural character of listed buildings, including a number of larger buildings in institutional and education use with their own grounds, as well as churches, public houses and brick and weatherboarded cottages.

298 Having reviewed the key views set out in the Mill Hill Conservation Area Appraisal Statement (2008), GLA officers are of the view that none of these would be materially impacted by the application and note that Barnet Council officers have come to a similar conclusion in this regard. Overall, having reviewed the applicant's TVIA and undertaken a site visit to these locations, GLA officers do not consider that the application would harm the setting or significance of the Mill Hill Conservation Area, due to the distance, accessibility, topography and orientation of routes found within the conservation area and presence of landscape features. Consequently, only the tops of the proposed buildings would be partially visible in the wider background context of long-distance views from restricted locations within the conservation area and where this is the case – View 1 from Mill Field at the Ridgeway and View 19 at Hammers Lane – GLA officers do not consider that the visual impact of the development would significantly alter the potential to appreciate the character, setting or significance of the conservation area.

299 GLA officers note that Barnet Council's case officer considered that the application would harm the setting of the Mill Hill Conservation Area based on two specific views in the applicant's TVIA - Views 2 and 19. View 2 is taken from Mill Hill Park close to the entrance from Wise Lane and demonstrates that the upper sections of a number of the buildings would be visible above the existing tree line along the southern edge of the park adjacent to the A1, albeit the majority of the development would be screened from view by this trees, particularly during the summer months of the year when these would be full of leaves. Barnet Council officers considered the development would have a significant and harmful impact on the context and setting of the conservation area.

300 Notwithstanding this, GLA officers do not consider that the development would appear overbearing or excessively dominant in this view given the distance of the site from this location and the existing landscape screening, particularly during the summer months of the year when trees would be full of leaves. Furthermore, the varied height and massing of the blocks and the generally unified architectural appearance, including the distinctive light grey stone frame and darker brick cladding, would ensure that these visible taller elements of the development would have an attractive and cohesive appearance which would contribute to the visual enclosure and setting of the park and the appreciation of the surrounding topography and urban context. Whilst the wider context of the park would be altered by development visible in the backdrop of the view behind the existing treeline boundary, this section of the park is a significant distance outside and to the south of the Mill Hill Conservation Area boundary, with the application site located a significant distance further south.

301 View 19 is taken from Hammers Lane, from within the Mill Hill Conservation Area looking south west towards the application site, which also follows the sloping topography. Having considered the visual impact of the development from this view, Barnet Council's planning committee report concluded that, the application would 'represent significantly adverse impacts on the setting of the respective conservation areas by reason of the excessive height of the development and the incongruity of this height with the setting of the conservation area.'

302 The applicant's TVIA demonstrates that the tops of the tallest blocks would be visible in this view, rising above the ridgelines of the residential properties (the majority of which are located outside of the conservation area to the south of Shakespeare Road). However, the majority of the development would be obscured from view by buildings and trees and due to the distance involved and topography. Therefore, whilst this partial visibility would to some extent alter the distant setting of the conservation area from this particular location, this would have a very minor and highly localised impact. Furthermore, whilst the development would have a different architectural

character and massing to that of the buildings and roofline of the conservation area, this is acceptable and would not undermine the ability to appreciate the significance of the conservation area or cause any harm.

Conclusion on heritage assets

303 GLA officers conclude that the application would not cause any material harm the Watling Estate Conservation Area or Mill Hill Conservation Area and would not harm any listed buildings. As such, the application accords with the relevant national, strategic and local planning policy requirements in respect of heritage, set out above. In coming to these conclusions, GLA officers have taken account of the statutory duties contained in the Planning (Listed Buildings and Conservation Areas) Act 1990.

Inclusive design

304 London Plan Policy 7.2 and draft London Plan Policy D3 require all future development to meet the highest standards of accessibility and inclusion, and that the design process has considered how everyone, including those with disabilities, older people, children and young people, will be able to use the places and spaces that are proposed. London Plan Policy 7.6 demands that buildings and structures meet the principles of inclusive design; and London Plan Policy 3.8 and draft London Plan Policy D5 require that ninety percent of new housing meets Building Regulation requirement M4(2) 'accessible and adaptable dwellings' and ten per cent of new housing meets Building Regulation requirement M4(3) 'wheelchair user dwellings', that is, designed to be wheelchair accessible or easily adaptable for residents who are wheelchair users.

305 Barnet Local Plan policy DM03 requires development proposals to meet the highest standards of accessible and inclusive design, whilst Policy DM02 sets out further specific considerations. The Pentavia Retail Park Site Brief also highlights the challenging changes in levels on the site, particularly along the site's northern boundary, and requires these to be successfully addressed.

306 Details of accessible and inclusive design have been provided within the Design & Access Statement, which focuses on the inclusive design measures within the public realm and buildings. The application drawings and landscape drawings also show how key inclusive design features would be incorporated.

Accessible homes

307 A total of 92 wheelchair adaptable dwellings would be provided which would meet Building Regulation M4(3), representing 10.8% of the units in the scheme, with the remaining units meeting Building Regulation requirement M4(2). The proposed wheelchair accessible/adaptable homes would be provided across the range of tenures and types of housing proposed and unit sizes in order to provide choice. A condition is recommended which would ensure that this level of accessible housing is secured, in accordance with London Plan Policy 3.8.

Public realm

308 As set out under the site description, there are significant site level changes between the northern boundary of the site and Bunns Lane and notable level changes across the site and along its boundary with the A1. The applicant's submitted plans show that there would be a 5.85 metre level change between Bunns Lane and the level of the nearest adjacent residential blocks (M and K) and the proposed archway entrance into the internal courtyard. This would be addressed by providing a sloped step-free route as well as a more direct stepped access. The ramped route would

contain three switch back turns to ensure an appropriately shallow and accessible gradient of 1:21. This would ensure an appropriate step-free access between the site and the proposed bus stops on Bunns Lane serving the 221 route. Direct step free access would also be provided to the proposed new bus stop on the A1 (northbound) serving the 113 route.

309 The applicant proposes to fund the installation of a lift access onto A1 (southbound) section to provide step-free access to the A1 (southbound) from Bunns Lane, which would be located adjacent to the existing stair case and ensure step free access for residents accessing the bus stop serving the 113 on this side of the A1.

310 The submitted plans also show there would be a change in height of approximately 5 metres from the site's southern entrance and the finished ground floor level of the internal podium level courtyard. To address this, three methods of access are proposed, including a Equalities Act compliant ramp access with a shallow gradient, steps and a lift.

311 The layout and design of the central route through the site would also ensure an accessible and pedestrian friendly environment would be achieved, with gradients or not more than 1:21 achieved where site levels change along this route. In addition, appropriate measures are proposed to ensure vehicle access is limited and managed along this route. Overall, the submitted drawings and landscape drawings demonstrate that appropriate levels and gradients can be provided across the site to ensure an inclusive environment throughout the scheme. Full details of the accessibility of the proposed landscaping and highways works in terms of access for pedestrians, cyclists and disabled people would be secured via planning condition.

Car parking

312 The development proposes 85 disabled car parking spaces serving residential units, which would be available for Blue Badge holders. This represents 10% of the total number of residential units proposed. In addition, two Blue Badge disabled parking spaces would be provided to serve the proposed retail unit at the southern entrance of the site. The proposed disabled parking provision serving both the residential and non-residential elements complies with the standards in the London Plan and draft London Plan and would be secured by condition. A car parking management plan would also be secured by condition to ensure these spaces are managed appropriately and allocated for Blue Badge holders.

Inclusive design - conclusion

313 The application would achieve a high level of accessible and inclusive design and would comply with London Plan Policies 3.8, 6.13, 7.1, 7.2, 7.5 7.6, draft London Plan Policies GG1, D3, D5, T6.1, T6.5, the Accessible London SPG and Barnet Local Plan policy DM02 and DM03, together with the aspirations for inclusive and accessible design set out in the Pentavia Retail Park Planning Brief.

Neighbouring amenity impacts

314 London Plan Policy 7.6 states that the design of new buildings should not cause unacceptable harm to the amenity of surrounding land and buildings, particularly residential buildings in relation to privacy, overshadowing, wind and microclimate. This is particularly relevant where tall and large-scale buildings are proposed. London Plan Policy 7.15 and Policy D13 of the draft London Plan state that development should manage noise to improve health and quality of life.

315 Barnet's Local Plan Policies CS5, DM01, DM02 and DM05 seek to protect Barnet's character and the amenity of existing residents, with further planning guidance provided in the Residential Design Guidance SPD and Sustainable Design and Construction SPD. Barnet Local Plan Policy DM01 requires development to be designed to provide adequate daylight, sunlight, privacy and outlook for adjoining occupiers and users. In relation to privacy, Barnet's Residential Design Guidance SPD (2016) requires a minimum separation distance of at least 21 metres between facing windows serving habitable rooms and 10.5 metres to a neighbouring garden to avoid overlooking. Policy DM01 also states that lighting schemes should not have a demonstrably harmful impact on residential amenity or biodiversity. The Council's Planning Brief states that the development should avoid impacts on the adjacent neighbours in terms of overshadowing, privacy and overlooking.

316 Owing to the commercial character of the site and its location bounded by major roads, the site is relatively isolated from surrounding existing residential properties; however, existing residential properties and a nursery are located adjacent to the site on Bunns Lane and two and three storey suburban properties are found to the east of the A1 and the west of Grahame Park Way.

Daylight, sunlight and overshadowing

317 The applicant's updated daylight/sunlight assessment considers the potential impact of the proposed development on existing neighbouring properties in terms of daylight, sunlight and overshadowing, taking into the existing baseline conditions experienced. The assessment uses three methods of assessing daylight - Vertical Sky Component (VSC); No Sky Line (NSL); and Average Daylight Factor (ADF) - and one measure of sunlight - Annual Probable Sunlight Hours (APSH) which are summarised below alongside the findings of the assessment.

318 Given the site location and surroundings, the following nearby neighbouring residential properties have been assessed to provide a baseline assessment of the existing daylight and sunlight conditions and the impact of the proposed development:

- Palmerstone Court
- 82 Bunns Lane
- 80 Bunns Lane
- 78 Bunns Lane
- 76 Bunns Lane
- Farmhouse Court, 19-24 Bunns Lane
- Farmhouse Court, 13-18 Bunns Lane
- Farmhouse Court, 7-12 Bunns Lane
- Farmhouse Court, 1-6 Bunns Lane
- 42 Brancaster Drive
- 40 Brancaster Drive
- 6 Briston Mews
- 16 Brancaster Drive
- 14 Brancaster Drive
- 12 Brancaster Drive
- 10 Brancaster Drive
- 13 Lancaster Close
- 18-30 Lancaster Close
- 1-26 Cranwell Court
- 1-33 Grahame Park Way

Vertical Sky Component (VSC)

319 The Vertical Sky Component test assesses the potential for daylight into a building by quantifying the amount of sky visible from within a room which is unobstructed by buildings and is measured from a centre point of a window pane. The BRE guidelines suggest that if the VSC is greater than 27%, sufficient skylight should reach the window in question. In terms of assessing the impact of a proposed development, the BRE guidelines state that occupants of the existing building shall experience a materially noticeable reduction in the amount of skylight they receive where

there the VSC with the development will be both less than 27% and less than 0.8 times its former value, with the guidelines suggesting that 'moderate adverse impacts' likely to be expected where the level of reduction is above 30% and 'substantial adverse impacts' above 40%.

320 The assessment of baseline conditions in terms of VSC demonstrates that all of the habitable rooms assessed within the above listed properties would meet the recommended BRE guidelines for VSC. The assessment of the impact of the proposed development in terms of VSC demonstrates that, whilst there would be some degree of change for VSC levels for 82 and 80 Bunns Lane (approximately 20-23%), this would not give rise to unacceptable adverse impacts and the residual VSC levels are acceptable would comply with BRE guidelines demonstrating that they would retain good levels of daylighting.

No Sky Line (NSL)

321 No-sky line (NSL) is a measure of the expected level of daylight penetration and distribution within a room, which is calculated by dividing those areas which can receive direct sunlight, from those which cannot. BRE guidelines state that if the no-sky line moves so that the area of the existing room which does receive direct skylight is reduced to less than 0.8 times its former value (reductions of 20% or more), then this will be noticeable to the occupants, and more of the room may appear poorly lit.

322 The applicant's NSL assessment shows that 168 of the 176 rooms assessed will comply with the recommended BRE guidelines (96%); however, 82 Bunns Lane (living room) and numbers 30, 27, 26, 25, 23 and 22 Lancaster Close (bedrooms) would fall below the recommended BRE guideline levels and experience a level of reduction in the existing NSL ranging between approximately 22% and 32%. These impacts are considered to be minor/moderate adverse.

Average daylight factor (ADF)

323 Average daylight factor (ADF) is a measure of the quality and distribution of light distribution within rooms, taking into account the size and number of windows. The applicant's daylight sunlight assessment shows that whilst there would be some degree of change for adjacent properties in terms of the baseline ADF values observed, varying from 0% to 18.5%; however, all of the 176 (100%) rooms assessed would meet the recommended target values set out in the BRE guidelines.

Annual probable sunlight hours

324 Annual probable sunlight hours (APSH) is a measure of sunlight that a given window may expect over a year period. In line with the BRE guidance, the applicant has assessed windows within the above properties which are orientated within 90 degrees of south (98 windows). All of the 98 windows assessed would comply with the above BRE APSH criteria, which demonstrates that an acceptable level of sunlight would be retained within these units.

Daylight and sunlight conclusion

325 BRE guidelines would be met for the vast majority of the adjacent existing properties and although the applicant's assessment shows that a limited number of properties a total of seven properties on Bunns Lane and Lancaster Close would experience some degree of change in relation to daylighting, these impacts would be minor/moderate and would not give rise to substantial adverse impacts in terms of daylight. It is also important to note that the NPPF requires that a flexible approach should be taken in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme

would provide acceptable living standards). Given the under-utilised character of the existing retail park site and the aspiration for and benefits of high density development, as set out in the London Plan and the adopted Planning Brief, some degree of change in relation to surrounding daylight conditions must be expected and the residual daylight levels achieved within the affected properties would mirror other urban contexts. As such, the proposed development complies with London Plan Policy 7.6 and Local Plan Policy DM01.

Privacy and overlooking

326 The closest blocks to Bunns Lane would be set back approximately 36 metres from the nearest residential properties to the north at Palmerston Court and the adjacent nursery. This accords with Barnet Council's SPD standards set out above. Screening provided in the form of the retained sections of the existing tree belt and as part of the proposed re-landscaping and public realm works to avoid any privacy or overlooking impacts, given the elevated nature of the site in relation to these properties. GLA officers consider the proposals acceptable, in relation to privacy.

Light spillage

327 The proposed development is likely to result in some degree of light spillage, given the scale and height of the buildings; although this is not expected to have a more significant impact than any other new development in an urban environment. Representations objecting to the application on the ground of light pollution were also received from occupants of Palmerstone Court, Rosebury Place, which is located to the north of the site off Bunns Lane. These representations raised concerns regarding external lighting within the scheme and the proposed pedestrian and cycle access and in terms of proposed works to the landscape buffer, which screens these properties from the existing retail park. UCL have objected to the application based on the impacts of the scheme in terms of light spillage and glare and its potential to impact the UCL's Observatory. This is covered in detail under paragraphs 374 to 380.

328 As set out below under biodiversity and trees, a condition is proposed to require further details of the works to this tree belt would need to be submitted and approved prior to commencement. A further condition is also recommended to require the submission and approval of a site wide lighting strategy, which would also address this issue.

Neighbouring amenity impacts conclusion

329 The proposals would have not have an unacceptable impact on the residential amenity of existing residents close to the site, and therefore the proposals comply with London Plan Policies 7.6, 7.7 and 7.15, and Barnet Policies CS5, DM01, DM02 and DM05.

Trees and biodiversity

330 Paragraph 170 and 175 of the NPPF state that planning decisions should contribute to enhancing the natural environment by minimising biodiversity impacts and avoiding or mitigating harm and providing net gains. Similarly, London Plan Policy 7.19 promotes the protection and enhancement of biodiversity, including green corridors and states that new development should realise the opportunities for positive biodiversity gains. Barnet Local Plan DM01 and London Plan Policies 5.10 and 7.21 support urban greening and the protection of existing trees which are either of value or protected and require any loss of trees as a result of development to be mitigated with replacement tree planting.

331 Whilst the Retail Park site as a whole includes little in the way of trees or biodiversity, the site boundary includes two sections of the adjacent tree belt and scrub land to the north which

separates the existing site from Bunns Lane. These sections of embankment would be partly removed and re-landscaped to provide two new pedestrian and cycle accesses and to address the change in levels; however, the majority of the tree belt would be retained. The applicant has submitted an Arboricultural Method Statement states that a total of 17 trees would be removed within this embankment to facilitate these works, with a further four trees pruned. This tree belt is not subject to any statutory or non-statutory designations in relation to nature conservation, with the nearest site being the Arrandene Open Space, which is located a substantial distance away from the site to the east and would not be affected by the development.

332 An Ecological appraisal has been undertaken which included surveys on site and concluded that, whilst this tree belt has some ecological value, there are no significant ecological constraints which should restrict the proposed works, this is subject to these being undertaken in a sustainable and sensitively designed manner. Furthermore, initial surveys did not find any evidence of protected species. As such, GLA officers recommend that a condition is attached to any planning permission to require the submission and approval of a more detailed arboricultural methods statement to identify the trees which are to be removed and retained within this tree belt and the measures which shall be taken to protect the remaining tree belt to ensure these are not damaged during the works, as well as the timing of the proposed works. Full details of a lighting strategy would also be required by condition, to ensure the proposals do not have a harmful impact on biodiversity or residential amenity, given the screening role the tree line current provides for properties on Bunns Lane, in accordance with Barnet Local Plan Policy DM01.

333 The proposed development would include substantial areas of landscaping, including tree planting herbaceous planting borders, hedges, lawns and green roofs and areas of landscaping which are removed would be appropriately re-landscaped and would not comprise buildings. The proposed landscaping works would be secured by condition, as would the on-going maintenance of landscaping and tree-replanting. Whilst sections of the tree belt adjacent to Bunns Lane would be removed to provide for the new accesses, these works which are essential to make the development acceptable in terms of site access and the majority of the tree line would be retained. As such, GLA officers consider that the application would include commensurate levels of tree re-planting and urban greening as mitigation and, in overall terms, the proposals would avoid harm and provide a substantial quantitative and qualitative improvements and net biodiversity gains, in accordance with the above NPPF, London Plan and Local Plan policy requirements.

Sustainability and climate change

334 London Plan Policy 5.2 and Policy SI2 of the draft London Plan, require development proposals to minimise carbon dioxide (CO₂) emissions to meet the Mayor's targets, in accordance with the following energy hierarchy:

- Be lean: use less energy
- Be clean: supply energy efficiently
- Be green: use renewable energy

335 These requirements are also set out in Barnet Local Plan Policy DM02 and DM04. From 1 October 2016, applications proposing residential buildings are required to meet the zero carbon target. In meeting this zero carbon target, residential schemes should achieve a minimum on-site reduction of at least 35% improvement beyond Part L 2013 Building Regulations, with any shortfall required to achieve the zero carbon target secured via a carbon off-set payment. Non-residential uses are not at present subject to the zero carbon target and should demonstrate at least a 35% on-site reduction beyond Part L 2013. Policy SI2 of the draft London Plan includes the expectation that energy efficiency measures alone should account for a minimum of 10% of the reductions carbon dioxide emissions for residential development and 15% for non-residential development.

336 An updated energy strategy for the site was submitted by the applicant as part of the revised application submitted in March 2019. Based on the energy assessment submitted in March 2019, an on-site reduction in CO₂ emissions of 48% beyond 2013 Building Regulations compliant development is expected on the residential element of the scheme, which exceeds the minimum expectations for on-site CO₂ savings, in line with GLA guidance (2018) and Policy SI2 of the draft London Plan. In addition to this, an on-site reduction in CO₂ emissions of 22% is expected on the non-residential element.

337 Following an initial review of the applicant's energy strategy, the applicant was advised that, whilst GLA officers considered that the applicant had broadly followed the energy hierarchy, further information, discussion and additional measures were required in relation to energy efficiency, overheating, cooling demand, the proposed gas fired Combined Heat and Power (CHP) system, provision for a future connectivity to a district heat network and further demonstration that the potential for solar panels on roof level has been maximised. These matters have been subject to further discussion between the applicant and GLA officers, with a revised energy strategy and updated overheating assessment submitted in June 2019. An assessment of these revisions is set out below.

Use less energy (Be lean)

338 A range of passive design and demand measures are proposed as part of the development to reduce energy demand, including high levels of insulation, double glazed windows, with the potential for passive ventilation maximised, taking into account air quality and noise constraints. The demand for cooling and the overheating risk will be minimised through a number of methods including balconies, solar glazing, solar shading and energy efficient appliances. In addition to this, a whole house mechanical ventilation heat recovery (MVHR) system would serve all of the residential blocks, with thermal controls provided to individual residents to address potential overheating issues, as well as smart meters to ensure efficient operation of cooling, where this is required during hot weather. The potential for passive/natural ventilation potential has been maximised, taking into account noise and air pollution issues.

339 In terms of performance, the applicant's updated Energy Strategy submitted in March 2019 demonstrated that energy efficiency measures would account for 4% (domestic) and 14% (non-domestic). Consequently, the applicant was required to model additional energy efficiency measures and commit to higher carbon emission savings through this part of the energy hierarchy, taking into account the relevant targets set out in Policy SI2 of the draft London Plan. The applicant was also required to take steps to further mitigate and reduce the risk of overheating, as their Dynamic Overheating Analysis submitted in March 2019 showed a 61% pass rate based on the relevant CIBSE industry standard recommendations for comfort level.

340 In response to this, the applicant has revised the fabric specification, reduced the glazing to wall ratios on facades at risk of overheating, and reduced the glazing g-values (solar transmittance) and provided improved shading through the use of balconies. The revised overheating analysis shows that an 85% pass rate would be achieved, which is a significant improvement on the previous overheating assessment submitted in March. On balance, this is acceptable in this particular instance, given the site layout constraints and requirement for windows adjacent to the A1 and M1 to be sealed shut due to air quality concerns. Overall, these amendments ensure that energy efficiency measures alone would achieve 13% reductions in CO₂ emissions, which exceeds the targets set out above.

Supply energy efficiently (Be lean)

341 The applicant's Energy Strategy submitted in March 2019 included the proposal for a site wide communal heat network, via a single gas fired Combined Heat and Power (CHP) plant, to be located in a lower ground floor level energy centre/plantroom. A 30% reduction in CO₂ emissions would be achieved through this second part of the energy hierarchy. However, given the reliance on CHP and the site's location within an Air Quality Management Area, the applicant was required to reconsider this approach and robustly demonstrate that additional low carbon alternatives to the proposed CHP have been considered, taking into account Policy SI3 of the draft London Plan and updated GLA guidance (October 2018)⁶.

342 In response, the applicant has provided a feasibility study for alternative technologies to the CHP, including an appraisal against both SAP2012 and SAP 10 carbon emissions factors and calculations. This assessment demonstrates that alternative forms of heat pump technology solutions perform better based on the GLA's preferred SAP10 assessment criteria, compared to the proposed CHP and shows that a revised energy strategy using air source heat pumps could potentially increase the site wide carbon savings to 53%.

343 Whilst the applicant has stated that this is expected to be the option they will pursue, this would be subject to further feasibility testing and costing, which is acceptable at this stage. Consequently, a condition is proposed to require the applicant to submit a finalised energy strategy prior to commencement of the development, with the agreed off-set payment required by Section 106. Further details on the proposed approach to calculating the required payment in lieu are set out below.

344 At present, there is no district network available in close proximity of the application site. The closest planned district heating network is within the Colindale Regeneration Area which is located to the south-west of the site beyond the M1 and Midland Mainline Railway. Whilst future connection to this proposed network would likely be impracticable due to the transport infrastructure between the two locations, obligations are proposed within the Section 106 Agreement to require the applicant to demonstrate that the scheme has been future proofed to allow for a connection to any district heating network which may come forward in future.

Use renewable energy (Be green)

345 In total, 447 solar photovoltaic panels are proposed on Blocks B, C, L and Q, which would provide a site wide domestic carbon emission reduction of 6.4%. These will be above green/brown roofs. Having considered the proposed roof layout and its use as communal amenity space on most blocks, GLA officers are satisfied that the potential for a PV installation has been maximised in this particular instance. GLA officers note that the final quantum of solar PV may change once the energy strategy is finalised and the requirements for accommodating air source heat pumps is confirmed. As set out above, full details of this would be required by condition.

Carbon off set payment

346 Based on various options, the applicant has stated that financial off-set payment would be likely to be between £600,000 and £762,000 depending on the exact heat pump solution to be implemented. By comparison, the applicant's energy strategy which was submitted in March 2019 and predicated on a CHP facility envisaged a site wide carbon off-set payment of £1,025,649 would be required. As at this stage there is a degree of uncertainty regarding the final strategy and the site wide level of reduction in CO₂ emissions, the Section 106 Agreement will secure the March 2019 figure as the default payment, and once the energy strategy is finalised and approved, a revised lower figure can be agreed, should this be demonstrated. Payment of the off-set

⁶ GLA Energy Assessment Guidance (October 2018), Appendix 3

contribution will be phased to address the potential need for the final instalment payment to be amended.

Conclusion – energy strategy

347 Overall, the range of CO₂ reductions would accord with the requirements of Policy 5.2 of the London Plan, 2018 GLA Guidance and Policies SI2 and SI3 of the draft London Plan.

Flood risk and sustainable urban drainage

348 The site is located within Flood Zone 1 and generally has a low risk of flooding from surface water; however, areas of the site adjacent to Bunns Lane and adjacent to the existing retail buildings have a 'high' and 'medium' risk of surface water flooding, according to Environment Agency Flood Risk Maps. The applicant's Flood Risk Assessment considers the risk of flooding from a range of sources and, taking into account the proposed mitigation measures, the residual flood risk on the site is considered to be low. The existing site is 100% impermeable and comprises a substantial area of hard standing and commercial buildings, with little in the way of landscaping. The proposed surface water drainage system would be designed to accommodate storms up to a 1 in 100 year event, plus an appropriate 40% allowance for climate change.

349 The applicant's proposed drainage strategy would attenuate surface water discharge to 50.1 litres/second into the existing Thames Water sewer on the south of the site. Whilst this would not achieve a greenfield run-off rate (which is considered to be 16.7 litres/second), the development would provide a 96% betterment on the existing situation, which is considered acceptable in this particular instance. This would be achieved through the provision of a 'BluRoof' system at podium level beneath the permeable areas of the central courtyard which would have a total capacity of 1,190 cubic metres. In addition, a below ground Geocellular storage tank is proposed below the entrance plaza to the south which would have a total capacity of 510 cubic metres. Overall, these two elements of the drainage strategy would provide a combined volume of 1,700 cubic metres of surface water attenuation capacity.

350 Landscape areas within the central courtyard would provide 4,890 sq.m. of blue/green roof areas, with a further 3,310 sq.m. of living roofs provided within communal roof top amenity space on top of the proposed the residential blocks. In addition to this, a further 11,300 sq.m. of soft landscaping would be provided adjacent to Bunns Lane, the A1 and M1. Two small open water features are also proposed along the centre of Mill Hill Walk, as part of the proposed public realm and landscaping approach. Impermeable, hard-standing areas along Mill Hill Walk would also be designed to drain towards the proposed SuDs features within the courtyard. In line with the drainage hierarchy in the London Plan and draft London Plan, the applicant has demonstrated why the provision of infiltration and open water features are not appropriate, given the site levels and the thickness of the concrete base which will sit below the car park.

351 In terms of water use, the applicant's sustainability statement states that the proposed dwellings will have a maximum indoor water consumption of 105 l/person/day and the non-residential components of the development will target a minimum BREEAM rating of 'Excellent'. Conditions are recommended to secure these features, in line with Policies 5.3 and 5.15 of the London Plan and Policy SI5 of the draft London Plan.

352 As such, the application accords with London Plan Policy 5.13, Policy SI13 of the draft London Plan and the relevant sections of Barnet Council Policies CS13 and DM04. The approach to flood risk management for the proposed development complies with London Plan Policy 5.12 and Policy SI12 of the draft London Plan. GLA officers recommend that a condition be included requiring the submission of a detailed drainage strategy to ensure that the finalised strategy

proposed is approved and the proposed works implemented, with a separate condition regarding management of the proposed drainage systems.

Urban greening

353 London Plan Policy 5.10 and Policy G5 of the draft London Plan, together with Barnet Local Plan Policy DM01 require new development to provide urban greening in order to contribute to the adaptation and reduction of the effects of climate change. As set out above, the proposed development would include substantial areas of landscaping, including tree planting herbaceous planting borders, hedges, lawns and green roofs and areas of landscaping which are removed would be appropriately re-landscaped and would not comprise buildings. The proposed landscaping works would be secured by condition, as would the on-going maintenance of landscaping and tree-replanting. Overall, the application provides appropriate levels of urban greening which would be of a high quality and constitute a substantial net increase in urban greening based on the existing site. As such, the application accords with the above policies.

Conclusion on climate change and sustainability

354 The proposed development would minimise carbon dioxide emissions to meet London Plan targets and local policy regarding climate change. The development would not increase flood risk and would deliver sustainable urban drainage and urban greening benefits over the existing situation at the site. The development has committed to achieve high standards in sustainable design and construction. In these respects, the development is in compliance with relevant planning policies regarding sustainability and adapting to climate change.

Other environmental issues

Air quality

355 A core priority of the Mayor's London Environment Strategy (2018) is to improve London's air quality and protect public health by reducing exposure to poor air quality, particularly for the most disadvantaged and those in priority locations such as Air Quality Focus Areas, and outlines a range of initiatives which seek to improve the capital's air quality over time, including the Ultra Low Emission Zone (ULEZ). London Plan Policy 7.14 and Policy SI1 of the draft London Plan state that London's air quality should be significantly improved and exposure to poor air quality should be reduced, especially for vulnerable people. Policy SI1 states that development proposals should not create unacceptable risk of high levels of exposure to poor air quality and should ensure design solutions are incorporated to prevent or minimise increased exposure to existing air pollution.

356 Barnet Council Policies CS13 and DM04 seek to improve air quality and ensure that development does not contribute to poor air quality. Further guidance provided in Barnet's Sustainable Design and Construction SPD, which sets out a number of air quality principles in relation to location/suitability and siting and design. The Council's adopted planning brief highlights the air quality issues present on the site and requires any planning application to be supported by a full assessment and appropriate mitigation and controls to limit health risks and demonstrate that future residents are not exposed to detrimental levels air pollution

357 The whole of the borough of Barnet is within an Air Quality Management Area. In addition, Barnet's Air Quality Action Plan (2017-2022) identifies the worst affected areas to alongside the busiest roads and junctions in the borough, including the M1, A1, A406 and A1000. The nearest Air Quality Focus Areas are at Apex Corner and Five Ways Corner to the north and south of the site. Published regional level mapping showing modelled annual mean levels of Nitrogen Dioxide

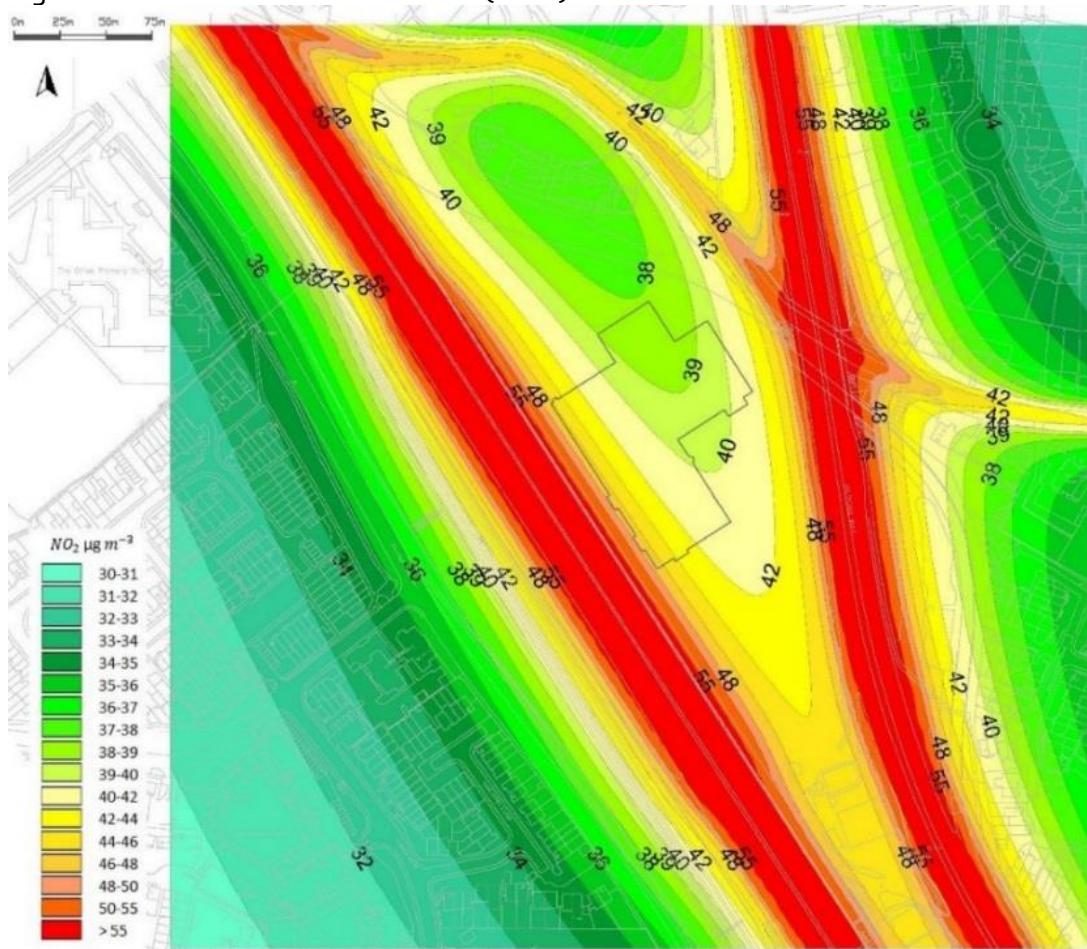
(NO₂) and Particulate Matter (PM₁₀) concentrations along and adjacent to the M1 and A1 currently exceed the nationally set quality objective limit values for human health set by the Air Quality Standards Regulations (2010) and the associated EU Directive⁷. These limits values are set at 40µg/m³ for both NO₂ and PM₁₀ (in terms of micrograms per cubic metre).

358 An updated air quality assessment has been undertaken and submitted as part of the applicant's Environmental Statement. This assessment has been reviewed by technical specialists advising the GLA and is considered to provide a robust assessment of the baseline and future air quality levels for the site and proposed development.

Baseline conditions

359 Baseline air quality conditions across the site were established following site specific monitoring of air quality levels at locations agreed with Environmental Health Officers at LB Barnet. This monitoring data confirmed that, as expected, the levels of NO₂ adjacent to the M1 and A1 are in excess of national objective levels (40 µg/m³) at an average value of 54.4 µg/m³, with the highest values found adjacent to the A1 at 62.3 µg/m³. Site specific air quality monitoring demonstrated that NO₂ levels gradually reduce across the site due to the site's topography and increased distance from the M1 and A1, with values of between 30.4 and 34.2 recorded adjacent to the existing retail building and the northern boundary of the site. Baseline NO₂ levels along Bunns Lane were found to range between 30.3 and 39.9 µg/m³. These lower levels are all below the national objective limit values. Modelled NO₂ contours are shown below in Figure 9.

Figure 9 – baseline site NO₂ contours (2016)



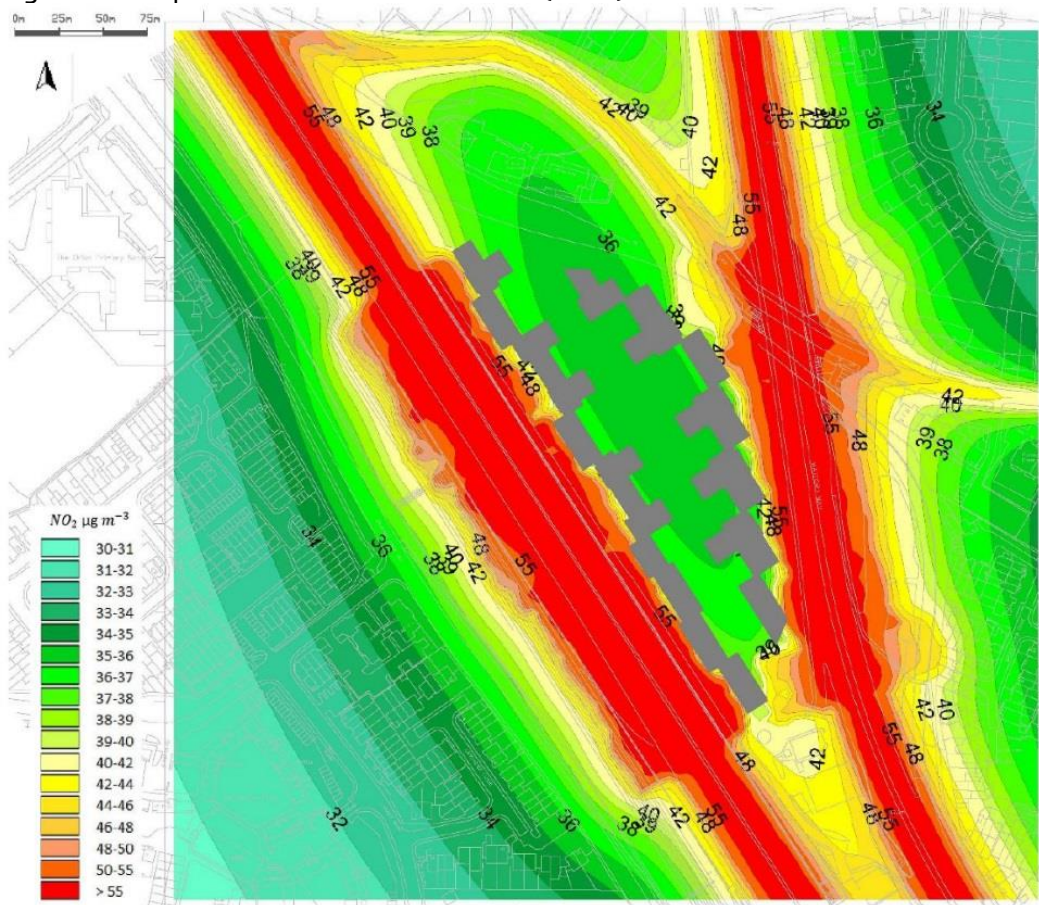
⁷ EU Directive (2008/50/EC, 2008)

Operational development (2026)

360 As part of the applicant's Air Quality Assessment, air quality dispersion modelling was undertaken to appraise the impact of the proposed layout and massing of the development in its potential to effectively shielding the internal elevations of the buildings and external amenity space within the courtyard from levels of poor air quality which exceed the objective limit values. This modelling data is shown below in Figure 10 and is based on the entire scheme being constructed and fully occupied as of 2026. This takes into account future air quality levels and the cumulative air quality effects associated with the development, taking into account the impact of additional road traffic, plant and boilers, as well as emissions generated during the demolition and construction phase of the development. As no account is made of likely improvements in air quality over time, this modelling is considered to represent a 'worst-case' scenario.

361 The dispersion modelling demonstrates that the proposed barrier block layout would reduce levels of NO₂ within the site by between 2 and 6 µg/m³ and confirms that air quality across all of the outdoor amenity space located within the internal courtyard will be within the objective limit values for NO₂, ranging between 30 to 36 µg/m³. Internal facing building facades and balconies within the courtyard would also be within the limit values from ground level and above. However, the external building facades adjacent to and facing the M1 and A1 would experience NO₂ levels of approximately 54 µg/m³, which are around 30% above the objective limits. The dispersion modelling also shows that NO₂ levels on the internal facing side of Block A would be slightly above the objective limits due to the leakage effect caused by the southern opening to the courtyard at this location. Blocks M and P, which are adjacent to Bunns Lane would be within limit values from the ground floor on both sides of the blocks.

Figure 10 – Operational site NO₂ contours (2026)



362 The applicant's assessment also includes an appraisal of the extent to which levels of NO₂ would reduce with height for external facing blocks and provides an assessment of levels within roof level communal amenity spaces. This demonstrates that levels of air pollution would reduce with height on most blocks to allow for the provision of external roof gardens to be provided in accordance with the objective limit values for NO₂. No roof level gardens are proposed on Block A (16 storeys), as the modelling shows that the objective limits would only be achieved from 15 storeys due to this block's location.

Proposed mitigation

363 To address air quality constraints, all of the windows proposed adjacent to the A1 and M1 and on all sides of Block A would be non-openable in order to protect residents from poor air quality which exceeds limit values and to ensure the levels of air quality levels within these units are effectively controlled and maintained. For these units, an alternative means of ventilation would be provided via a whole house Mechanical Ventilation and Heat Recovery (MVHR). This system would draw in and filter cleaner air from within internal courtyard, with air intake facilities provided either on internal courtyard facades or roof level to ensure these are provided in locations which are expected to comply with the objective limits.

364 Given that the modelled levels at roof level are found to be close to the objective limit values on a number of blocks, filters are proposed on air intakes at roof level. The applicant has also confirmed that filters would also be provided on air intakes to be located on the internal facades within the courtyard, even though the modelling shows these locations to be within the limit values, as this would ensure protection against any future lowering of the current levels.

365 Thermal control would be provided within units to allow residents to moderate the temperature and address the risk of overheating without needing to open windows. A mechanical purge ventilation function would also enable residents to immediately remove high concentrations of domestic borne odours, pollutants or water vapour generated from within units intermittently as a result of certain household activities, for example, odours associated with burnt food, painting and decorating or condensation generated by the drying clothes.

366 As set out under residential quality, the majority of residential units proposed are dual aspect and would therefore have openable windows facing onto the internal courtyard serving the living rooms and balconies and natural ventilation (except for units in Block A). No single aspect units are proposed facing the M1 Motorway and the vast majority of the single aspect units included within the scheme would face onto the internal courtyard (88%), so would benefit from openable windows, external private amenity spaces and natural ventilation. In total, 30 single aspect units are proposed facing the A1 which would not be naturally ventilated and would have sealed windows. These units are north-east facing and not expected to experience overheating. As set out above, a range of private amenity spaces would be provided across the scheme, with winter gardens provided where either air quality or noise levels would be above the relevant maximum limit value. No private amenity space is proposed for eight units ground floor units adjacent to the A1, within Blocks B, D, F and H due to air quality levels.

367 The applicant's original Air Quality Assessment (2018) was assessed by the Council's Environmental Health officers who were satisfied with the assessment and considered the proposed mitigation strategy sufficient to address concerns regarding air quality and recommended that windows are permanently sealed shut where this is necessary to ensure compliance with the objective limit values for NO₂. The applicant's updated Air Quality Assessment (2019) has been subject to further independent review by technical specialists commissioned by the GLA who were satisfied with the robustness of the assessment and concluded that the applicant's proposed mitigation strategy is acceptable.

368 Whilst, in most instances it would be desirable to avoid windows being permanently sealed shut, GLA officers consider that, in view of the air quality levels along the A1 and M1 which exceed national air quality objectives limits for NO₂, it is necessary in this case to appropriately control internal air quality levels within residential units to avoid risk to human health. Furthermore, the proposed mitigation strategy would potentially be undermined should residents within the affected units be able to open windows. Accordingly, GLA officers recommend that this approach is followed and secured appropriately by planning permission.

369 As part of the public consultation, objections have been submitted in relation to air quality and the applicant's proposed mitigation strategy, with respondents stating that the applicant's proposal to seal windows is not a realistic, sustainable or practical solution for residents over the longer-term and that units would experience overheating. GLA officers consider that these issues have largely been addressed as part of the detailed considerations set out above. Further details of the MVHR system would also be required by condition, including exact air intake locations, mechanisms for filtering pollutants at these sources, measures to address overheating within units, together with a management and maintenance plan and response plan in the event of system failures or complaints. Subject to these conditions being met, the proposed mitigation and control measures are considered appropriate and the internal standard of residential accommodation would be acceptable from an air quality perspective, as would the proposed private, communal and public external amenity space within the scheme.

Cumulative impacts on surroundings

370 The cumulative impact of the development on surrounding receptors has been assessed in terms of air quality, as part of the applicant's Air Quality Assessment, by comparing modelled air quality levels both with and without the development and undertaking dispersion modelling to appraise the potential canyon effect of placing large blocks adjacent to the M1 and A1 in terms of reducing the dispersal of pollutants and traffic and plant emissions generated by the Pentavia development. The scenarios tested take into account changes to the existing baseline air quality levels between 2016 and 2026 as a result of expected traffic growth. This assumes no background improvements to local air quality. This modelling shows that air quality levels are likely to deteriorate further in the area in the 'without development' scenario and demonstrates that there would be very minor net additional increase in NO₂ levels experienced by receptors in the area (between 0.01 to 0.15 µg/m³) as a result of the completed scheme. This cumulative change is below 1% and is not considered give rise to unacceptable impacts or lead to a significant deterioration of existing levels of poor air quality in the adjacent area.

Air quality neutral/positive assessment

371 In line with London Plan Policy 7.14, new developments should be at least 'air quality neutral' and not lead to further deterioration of existing air quality, with Policy SI1 of the draft London Plan requiring large-scale development such as this to be 'air quality positive'. An air quality neutral/positive assessment has been undertaken as part of the applicant's Air Quality Assessment which demonstrates that the development does not meet the air quality neutral benchmark for building emissions or transport. To mitigate this, the following offsetting measures are proposed: energy plant fitted with Selective Catalytic Reduction (SRC), additional electric vehicle charging points (which exceed the London Plan requirements) and travel plan incentives. The approach to electric charging vehicles and travel plan incentives is detailed in the transport section of this report. These measures are considered to provide acceptable levels of mitigation and would be secured by condition and planning obligation, in accordance with London Plan Policy 7.14.

Demolition and construction – air quality impacts

372 The ES includes a construction dust risk assessment to determine the likely potential for localised air quality impacts associated with the proposed site clearance, earthworks, construction works, as well as associated with the number of HGV (heavy duty vehicle) movements. Up to 12 HGV movements are expected per day, which is not considered high enough to cause significant adverse effect or local air quality sensitive receptors given that these vehicles would also be using the A1. In addition to this, the ES outlines a range of detailed mitigation measures which should be employed during the demolition, groundworks and construction works to manage and control dust and air quality impacts. Should planning permission be granted, the applicant would be required to submit a Construction Environmental Management and Logistics Plan prior to undertaking any works on site. This would need to outline detailed mitigation measures to control and address dust and air quality impacts, including proposals for monitoring and a pollution response plan. Detailed matters relating to HGVs and construction logistics and plant and machinery would be also address by way of this condition.

Air quality – conclusion

373 Subject to the above conditions being secured, GLA officers consider the proposed mitigation and control measures to be appropriate in this instance to address air quality concerns and ensure that an acceptable standard of residential accommodation in terms of air quality. The impact on local air quality of additional road transport and energy plant emissions has been shown to be acceptable. However, as the application does not meet the requirements of the London Plan in terms of being air quality neutral, additional mitigation proposed should be secured by condition and planning obligation.

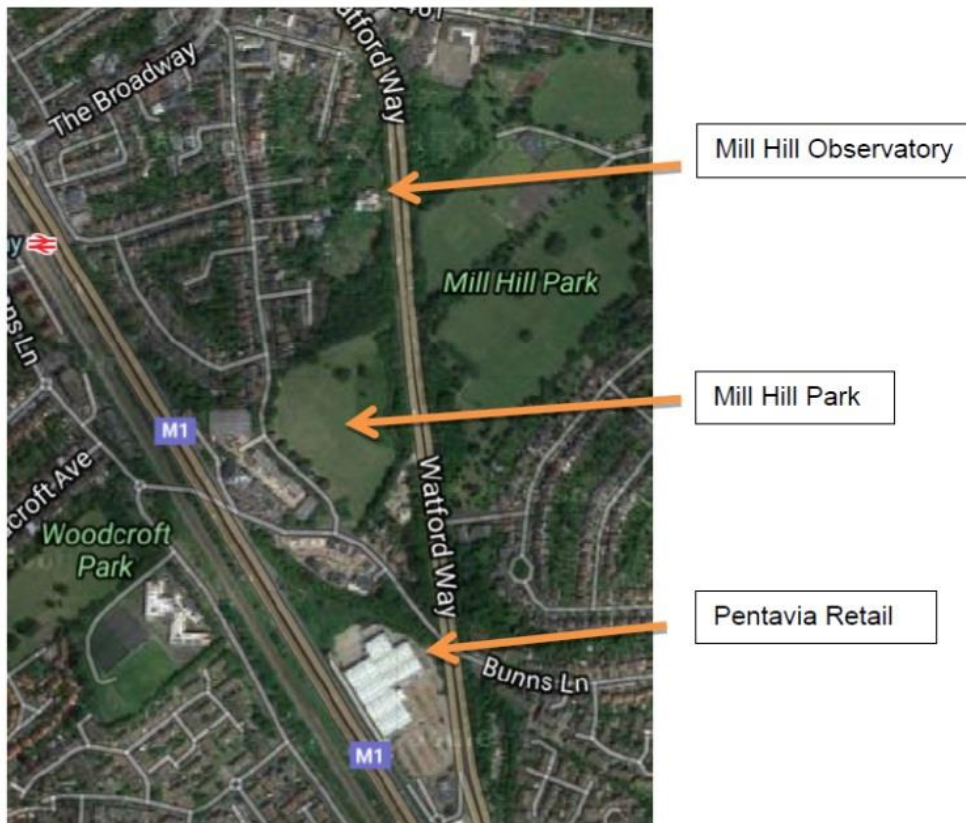
Light pollution

374 The application site is located approximately 500 metres south of the UCL Observatory in Mill Hill which is operated by UCL's Department of Physics and Astronomy. Given the sensitivity of the facility to night time light pollution and the site's location in direct line of sight across Mill Hill Park, the adopted Planning Brief highlights this as an important material planning consideration and states that any development should avoid artificial light impacting the operation of the observatory and be and of an appropriate height and massing. The location of the observatory in relation to the site and in terms of its existing context is shown below in Figure 11.

375 The revised application is accompanied by an updated Visibility and Light Pollution Assessment (2019) which assesses the potential impact of the scheme on the performance of UCL's Observatory, taking into account the proposed amendments to the massing of the scheme. As with the previous applications submitted, this report assesses the baseline conditions and potential impact on the observatory's view of the night sky from verified views pointing south from the main Radcliff telescope (View 21 of the TVIA).

376 The verified view demonstrates that the development would be almost completely obscured from view during periods of the year when leaves are on the trees. However, the very top of two of the proposed taller buildings would be partially visible through the foliage at the top of the existing tree line. Overall, the applicant's assessment concludes that the application would not alter the observatory's view of the night sky or worsen the current baseline conditions in terms of light pollution or significantly affect the work of the observatory. Notwithstanding this, the assessment recommends that various measures are incorporated in the design and specification of the external lighting (eg, lighting angles, fittings) and the materials used on building facades to ensure light spillage, pollution and glare is reduced given the sensitivity of the observatory to additional light sources. Accordingly, an appropriately worded planning condition is proposed to require the submission and approval of a lighting strategy prior to commencement, which would need to be in line with the assessment's recommendations.

Figure 11 – UCL Observatory in Mill Hill and site context



377 As set out under the consultation summary, UCL observatory have objected to the application on the ground of light pollution, which they consider would have a detrimental impact on the operations of observatory. This includes light pollution generated by the proposed buildings and external lighting of external spaces but also as a result of light from the headlights of cars travelling on the A1 being reflected by building facades and contributing to levels of scattered light and glare. In relation to the applicant's visibility study, UCL's have stated that the tree line would not provide screening during the winter months when leaves would not be on the trees, which is also an important time due to the longer periods of darkness and presence of objects in the night sky towards the southern hemisphere.

378 Although baseline and future levels of scattered light and night time glare have not been modelled, the assessment includes night time photographs taken during winter months. This demonstrates that the existing views to the south are characterised by levels of light pollution and glare that are typical with an urban location such as this and given the facilities very close proximity to the A1 in particular given the levels of reflected light and illumination from street lights and the breakage in the tree line at the vehicle entrance to the UCL facility on the A1. Whilst the night time view shows that the surrounding foliage does provide a degree of visual screening during winter months, it shows that there are a number of existing buildings and structures which are visible to the south, including Parkmead Gardens and more distant taller buildings which are visible along the horizon, including Wembley Stadium and two taller buildings located on Edgeware Road.

379 In terms of the proposed architectural approach, the buildings would be predominantly clad in brick, stone and masonry, which are non-reflective materials, in line with the assessment recommendations, details of which would be secured by condition. As set out in more detail under transport, a separate stand-alone condition is also recommended in relation to solar glare which would require the applicant to provide a strategy to control and limit the potential for solar

reflection and glare generated by the proposed buildings from affecting motorists on the M1 and A1 to ensure their safe operation in terms of highways safety. To mitigate these risks the applicant would need to ensure non-reflective glazing and materials are provided on external facing elevations of the blocks and undertake further modelling of solar reflection levels. These measures would also limit the potential for night time pollution and scattered light generated by passing vehicles on the A1 being reflected by the proposed buildings. GLA officers also note that the UCL facility is a significant distance from the nearest proposed building and the entire stretch of road in between is lined by a dense tree belt on both sides, which would further mitigate the potential for scattered light.

Conclusion – light pollution

380 Given the distance of the site from the facility and the degree of screening provided by the existing tree lines (taking into account the seasonality of the foliage), GLA officers do not consider that the application would significantly reduce the UCL facility's existing sky view, with the buildings almost totally screened from view. Light from windows serving residential units, as well as external lighting within the proposed development would contribute to overall levels of sky glow/brightening within this urban location, however, this would be alongside the artificial light levels generated by other buildings and major roads in this urban location. Furthermore, the levels of light impact would be commensurate with that of a higher density residential-led scheme in this location and appropriate conditions would be attached to control and limit the potential for light intrusion, spillage, or glare and to ensure the provision of non-reflective glazing and building materials is incorporated to limit levels of reflected light and scattered light. Subject to these conditions being secured, GLA officers do not consider that the application would generate which would worsen the current baseline conditions experienced by the UCL observatory in terms of night time light pollution or sky visibility. As such, the application is considered acceptable in this regard.

Wind

381 A wind microclimate study has been carried out to assess the existing wind conditions at and around the site and to assess the wind conditions that would occur with the introduction of the new development and associated landscaping, taking into account the industry standard Lawson criteria for pedestrian comfort and safety. This assessment shows that wind conditions in and around the site would be suitable in terms of pedestrian safety and comfort. As such, the application would not give rise to any significant adverse impacts in relation to wind microclimate, in accordance with London Plan Policy 7.7.

Waste

382 London Plan Policy 5.17 requires adequate provision for waste and recycling storage and collection facilities as part of new developments. In relation to waste generated through demolition, groundworks and construction, Policy 5.18 requires applicants to produce site waste management plans to arrange for the efficient handling of construction, excavation and demolition waste and materials. Draft London Plan Policy SI7 seeks to reduce waste and increase material reuse and recycling and promotes a circular economy. The policy also sets several waste targets including a strategic target of zero biodegradable waste or recyclable waste to landfill by 2026. Barnet Local Plan Policy CS15 promotes re-cycling and re-use of waste and requires new development to provide waste and recycling facilities which fit current and future collecting practices and targets.

Construction waste

383 The applicant has committed to resource efficiency and material management during construction, directing construction waste away from landfill and re-using materials, where possible. A condition is recommended in relation to the Construction Environmental Management Plan (CEMP) which would require the submission and approval of a waste management plan to set out a scheme for the recycling and disposal of waste generated through the demolition, site clearance, groundworks and construction, in accordance with London Plan Policy 5.18.

Operational waste

384 The applicant has submitted an outline waste management and recycling strategy (OWMS) which has been informed by discussions with Barnet Council waste collection services. The strategy sets out minimum internal storage capacity (allowing for segregation of waste) for individual units as well as the location and size of communal waste and recycling storage and collection facilities. These communal waste and recycling storage facilities would be located within the lower ground floor car park and moved to an agreed collection point at the time of collection by on-site management, which is expected to be along the western service road and southern site entrance.

385 The proposed strategy is acceptable in line with London Plan Policies 5.17 draft London Plan Policy S17 and Barnet Local Plan Policy CS15. Notwithstanding this, to ensure the proposed strategy is implemented and subject to further detailed discussion with the local waste collection authority, a condition is recommended to require a more detailed operational waste management and recycling strategy (OWMRS) to be submitted and approved by Barnet Council prior to any superstructure works being undertaken. Associated issues in relation to logistics and refuse vehicle access and movements would also be covered by further recommended conditions relating to deliveries and servicing and highways design.

Contaminated land

386 London Plan Policy 5.21 and Barnet Local Plan Policy DM04 requires the investigation and, where appropriate, remediation of contaminated sites, with appropriate mitigation to ensure contaminated land is brought back into beneficial use and to avoid harm to the environment or human health. A ground investigation report (2016) has been submitted as part of the application. This included a desk-based assessment, on-site survey and intrusive site investigations to provide an initial evaluation of the ground conditions, geology, hydrology and the potential extent of soil contamination, taking into account the historic use of the site. The assessment concludes that the potential risks arising from contamination in terms of hydrological features and groundwater and human health can be mitigated appropriately via industry standard recommended best practice measures Construction Environmental Management Plan (CEMP). Accordingly, appropriately worded planning conditions are recommended to require further assessments to be undertaken in relation to land contamination to determine the level of contamination in more detail, with full details of the proposed mitigation measures to be set out by the application as part of a CEMP.

Transport

387 Chapter 9 of the NPPF sets out the Government's aim to promote the use of sustainable modes of transport. When considering the transport implications of development proposals, the NPPF states that decision-makers should ensure that site specific opportunities available to promote sustainable transport modes have been taken up; safe and suitable access to site would be achieved for all users; and any significant impacts from development on transport network (in terms of capacity or congestion) or highways safety can be mitigated to an acceptable degree.

Paragraph 109 of the NPPF states that development should only be refused on highways grounds if there would be an unacceptable impact on highway safety or where residual cumulative impacts on the road network would be severe. Paragraph 110 of the NPPF sets out additional criteria which should be addressed which includes pedestrian, cycle and inclusive access.

388 London Plan Policy 6.1 sets out a strategic approach for transport in London. This includes the aim to encourage patterns of development that reduce the need to travel, especially by car, through the use of maximum car parking standards; seeking to improve the capacity and accessibility of public transport, walking and cycling infrastructure; encouraging shifts to more sustainable modes of travel and promoting walking and safe and step-free access. Policy 6.3 states that the impact of development proposals on transport capacity and network should be fully assessed and not adversely affect safety, with schemes appropriately phased where transport capacity is insufficient to allow for the expected trip generation. Other relevant transport policies are Policies 6.9, 6.10, 6.11 and 6.13 which cover cycling, parking and traffic congestion. Policy 8.2 of the London Plan sets out the Mayor's priorities for planning obligations and states public transport improvements should be given the highest importance, alongside affordable housing.

389 The Mayor's Transport Strategy (2018) (MTS) seeks to promote sustainable mode shift, reduce road congestion, improve air quality and assist in the development of attractive, healthy and active places. The MTS aims to ensure that by 2041, 80% of all Londoners' trips will be made on foot, by cycle or by public transport. Policy T1 of the draft London Plans requires development proposals to support this overarching aim, as do a range of other policies in the draft London Plan on 'Healthy Streets' (Policy T2), cycling (Policy T5), parking (Policy T6, T6.1-T6.5) and funding necessary transport mitigation measures (Policy T9). Policy T4 of the draft London Plan requires transport impacts to be assessed and mitigated and avoid road danger.

390 Barnet Council Policy CS9 seeks to ensure that development supports the efficient use of the local road network and the use of more environmentally friendly forms of transport and is matched by transport capacity. Policy DM17 requires major development proposals with significant trip generation potential to be in locations which are (or can be made) highly accessible by a range of transport modes and sets out maximum parking standards. It states that proposals should provide safe and suitable access for all road users and improve existing cycle and pedestrian facilities, where appropriate.

391 The Pentavia Retail Park Planning Brief highlights the need for the redevelopment of the site to address a number of site constraints, with respect pedestrian and cycle access, topography and the site's relatively low PTAL rating, including the permeability and accessibility constraints associated with the boundary effects of the A1 and M1 and the nature of the existing lineages to the wider area which are via underpasses, ramps, stairs and footbridges. The Brief sets out the requirement for any future development to provide:

- an innovative and exemplary design that helps to re-integrate the site with surrounding residential areas, as well as screening it from the M1 and A1;
- pedestrian and cycle access improvements to connect the site to Bunns Lane;
- improved direct, safe and accessible links to the nearby bus stops, local primary and secondary schools, Mill Hill Broadway Town Centre, Station;
- a range of sustainable transport proposals – including car club and travel plan incentives, with appropriate financial contributions likely to be required to improve local sustainable transport;
- suitable car parking provision that accords with the Council's parking standards set out in Barnet Local Plan Policy DM17, with parking restrictions on the adjacent local streets likely

to require review and changes likely to be required to the existing CPZ and potentially the introduction of new controls; and

- vehicle access to site via the existing slip road on the A1 (northbound), given congestion on Bunns Lane and ensure the impact of the development on the highway network is minimized.

Trip generation and mode split

392 The applicant's updated Transport Assessment (TA) (2019) predicts that the application as a whole will generate a total of 396 trips during the morning peak hour (08.00 to 09.00) and 390 trips during the afternoon peak hour (17.00 to 18.00), with the majority of trips expected to be made by either public transport, walking and cycling (78% during AM peak; and 68% during the PM peak). In total, the TA expects 3,775 daily trips to be generated across all transport modes, of which 1,171 would comprise vehicle based trips (29%) and the remaining 2,604 (69%) would involve either walking, cycling, and public transport, with trips by bike accounting for only 3% of the total forecast daily trips. The assessment of the likely trip generation and modal split is considered acceptable, taking into account the characteristics of the site and the proposed development and the restricted parking provision proposed.

Residential car parking

393 London Plan Policy 6.13 and Policy T6 of the draft London Plan set out the principle of restricting car parking provision, taking into account planned improvements and the future connectivity and PTAL levels of a site and, in order to achieve this, set out maximum parking standards. As set out earlier, currently the majority of the site is within PTAL 1b and a small area to the north could achieve PTAL 3 once the new access is provided on Bunns Lane. As such, a maximum parking standard of between 1 and 1.5 spaces per unit would apply to the site, as set out in Table 6.2 of the London Plan and Table 10.3 of the draft London Plan. Barnet Council Local Plan Policy DM17 applies slightly different maximum parking standards for residential development, which are set out below:

- 2 to 1.5 parking spaces per unit for houses and flats of 4+ bedrooms
- 1.5 to 1 parking spaces for terraced houses and flats of 2 to 3 bedrooms
- 1 to less than 1 parking space per unit for 1 bedroom flats

394 It should be recognised that these are maximum parking standards and should not be applied as mandatory or minimum policy requirements to individual applications. London Plan Policy 6.13 sets out the flexibility for Outer London boroughs to apply more generous parking standards in areas with low public transport access (generally PTAL 0-1 locations), as is set out in Barnet Local Plan Policy DM17; however, both the London Plan and Barnet Local Plan are clear that these are permissive maximum standards, rather than restrictive minimum standards.

395 The maximum parking standards in the London Plan seek to ensure that as an appropriate balance is struck between promoting new development and preventing excessive car parking provision that can undermine the use of other modes, such as public transport, walking and cycling, with large-scale residential development expected to be supported by necessary mitigation measures in relation to public transport impacts as well as measures to promote modal shift to public transport use and active travel modes, as well as other necessary off-site mitigation measures to address the potential for overspill parking and congestion issues, for example, through the use of Controlled Parking Zones (CPZ).

396 The application seeks planning permission for a total of 366 residential car parking spaces for future occupants of the scheme, of which 85 would be provided for disabled Blue Badge holders and 10 spaces would be for visitors. Overall, the proposed parking provision equates to a

parking ratio of 0.43 parking spaces per unit, with disabled parking provision representing 10% of the total number of residential units proposed, all of which would be provided from the outset following the completion of the scheme as a whole. All long-stay residential parking provision would be accommodated within a lower ground floor car park location below the podium level courtyard. In addition, five car club parking spaces would be provided within the public courtyard, adjacent to Blocks Q and R.

397 In addition to this, the applicant has stated that a further 31 car parking spaces could be provided within the scheme, should additional demand arise from residents. These additional spaces could be provided within landscaped areas adjacent to the western access road and would increase the proposed car parking ratio to 0.47 (397 residential car parking spaces in total); however, as these spaces are not shown on the application documents, this would require revisions to the application to be submitted and approved.

398 In terms of active and passive provision for electric charging vehicles, the application proposes a total of 141 residential car parking spaces with electrical charging points (39%). This would include all 85 disabled parking spaces and an additional 56 standard parking bays. All of the remaining parking spaces would have passive provision. This significantly exceeds the requirements set out in Table 6.2 of the London Plan and provides mitigation for the scheme falling short of the air quality neutral standard in terms of building and transport emissions benchmarks. The proposed parking provision, including disabled parking spaces and their allocation and management, electric charging facilities would be secured via a Car Parking Management Plan condition, with the proposed car club bays secured by planning obligation.

399 By way of comparison, the original application determined by Barnet Council sought planning permission for 724 residential units and 545 residential car parking spaces (of which, 72 were disabled parking spaces and 41 were visitor spaces). This equated to a ratio of 0.75 spaces per unit. The revised application therefore increases the number of residential units by 120 units and reduces the number of residential parking spaces by 179.

400 In determining the original application, Barnet Council officers considered the proposed parking ratio of 0.75 spaces per unit acceptable in this instance and parking provision was not listed as a reason for refusal. Furthermore, the officer's planning committee report noted that the application site is isolated from the surroundings by major roads, so the extent of overspill parking is likely to be limited. The report also noted that the applicant's parking survey demonstrates that there is a degree of residual capacity on the surrounding streets (72%) to accommodate overspill parking should this arise.

401 A substantial number of objections were received on the issue of parking from local residents, as well as the Mill Hill Preservation Society, London Assembly Member Andrew Dismore and the local Matthew Offord MP, both as part of public consultation on the original application submitted to Barnet Council. In summary, these objections state that the on-site parking provision is too low and that, as a result, future residents within the development are likely to seek to park vehicles on adjacent roads, giving rise to overspill parking issues. The surrounding network of roads are not covered by Controlled Parking Zone (CPZ) restrictions, apart from Saracens event day CPZ restrictions.

402 In reviewing the revised application, Barnet Council officers consider the reduced parking at a ratio of 0.43/0.47 spaces per unit to constitute an unacceptably low level of residential parking, in view of the site's poor level of accessibility and have proposed the additional updated reason for refusal in relation to parking, which was endorsed by Barnet Council's Planning Committee: *"The proposed development would provide inadequate levels of residential parking provision to serve the development, resulting in likelihood of additional parking stress within the surrounding area parking to the detriment of highway and pedestrian safety and the free flow of*

traffic, contrary to Policies CS9 and CS15 of the Local Plan Core Strategy (adopted September 2012), and Policy DM17 of the Local Plan Development Management Policies DPD (adopted September 2012)."

403 Given these concerns, GLA officers consider that it would be appropriate for Barnet Council to strengthen the surrounding on-street parking controls to discourage overspill parking from this site and manage local parking demand so that it does not impact on pedestrian and cycle routes or the operation of bus services. The applicant has agreed to fund the full costs of the Council undertaking up to two rounds of public consultation on a CPZ for the area, which would be secured via planning obligation. In addition to this, whilst no CPZ is in place at the present time, the Section 106 agreement would exclude future residents within the site from being able to obtain a CPZ permit, should one be adopted in the future. Formal consultation on and adoption of a CPZ would, however, be a matter for Barnet Council to progress in discussion with local residents and businesses. Given that the applicant's proposal to fund consultations on a CPZ could feasibly be subject to delay or indeed not be taken forwards, it is appropriate to consider whether the application would give rise to unacceptable levels of harm in relation to parking stress, congestion or highways and pedestrian safety in the interim, or in the event that the proposal for a CPZ is not adopted.

404 In this scenario, GLA officers do not consider that the application would give rise to unacceptable levels of overspill parking in the wider area, taking into account the applicant's assessment of the residual capacity and occupancy of the existing on-street parking provision on the surrounding streets, the amount of private on-plot parking serving the typology of suburban homes in the area, as well as the isolated nature of the site and severance issues created by the A1, M1 and Midlands Mainline Railway. Furthermore, GLA officers do not consider that in this scenario the application would give rise to significant traffic congestion and highways and pedestrian safety issues. Moreover, the reduced quantum of car parking is considered appropriate in this instance as a means of limiting local highways impacts and helping to embed more sustainable travel patterns, in combination with the package of sustainable transport mitigation measures proposed. Notwithstanding this, GLA officers consider that the above CPZ related obligations are considered necessary mitigation in this instance, helping to contribute to the package of sustainable transport measures supporting the modal share assumptions in the TA and to encourage the use of public transport and active travel. Furthermore, GLA officers consider that the Section 106 agreement should require the applicant to fund the costs of the initial implementation of the CPZ in terms of Traffic Management Orders (TMOs), marking and signage (should the CPZ be taken forwards), given that the CPZ would be initiated as a result of the development.

405 Overall, GLA officers consider the proposed level of residential parking provision does not conflict with the maximum standards set out in either London Plan Policy 6.13 and Barnet Local Plan Policy DM17 and, subject to the delivery of the applicant's package of proposed mitigation measures to promote the use of sustainable modes of transport and reduce the potential for overspill parking in the surrounding areas, the application would accord with the parking policies set out in the development plan.

Non-residential car parking

406 A total of 9 parking spaces would serve the non-residential retail floorspace, of which two of these spaces would be designated disabled parking spaces for Blue Badge holders. All of these parking spaces would serve the Class A1 retail unit proposed at the southern entrance of the site and would be located on the western slip road adjacent to M1. This is appropriate, given that the remaining commercial and community floorspace proposed is intended to serve the needs generated by the development and would be served by step free access. The non-residential car parking provision accords with London Plan Policy 6.13, Policies T6.3 and T6.5 of the draft

London Plan and Policy DM17 of the Barnet Local Plan and would be secured by planning condition.

Cycle parking

407 Overall, the application proposed 1,603 cycle parking spaces. A total of 1,574 cycle parking spaces are proposed to serve the residential units, of which 30 short-stay cycle parking spaces would be provided for visitors. Long-stay residential cycle parking would be located within the lower ground floor car park, with 17 separate secure cycle parking facilities proposed at different locations across the site. A further 29 cycle parking spaces will be provided in relation to the retail, restaurant/cafe and leisure uses. This accords with the standards in the London Plan and draft London Plan and would be secured by planning condition to ensure they are designed and delivered in accordance with the London Cycle Design Standards.

Walking, Cycling and Healthy Streets

408 The residential-led mixed use redevelopment of the site is challenging in terms of pedestrian and cycle access due to the way the site is sandwiched by the M1, A1 and Midland Mainline Railway and the severance, noise and air quality issues these major transport routes cause. Currently, there is no direct pedestrian or cycle access from Bunns Lane and pedestrian access to the site is only available via the following routes:

- from the north via the staircase or ramped access onto the A1 (northbound) from Bunns Lane;
- from the west via the M1 footbridge and underpass below the Midland Mainline Railway;
- from the east via the existing A1 underpass to the south of the site at Tithe Walk;

409 The applicant has undertaken a PERS audit of the quality of 16 key local pedestrian links to and from the site, together with ten nearby bus stops. In addition to this, as part of their Transport Assessment Addendum (April 2019), which was submitted as part of the revised application in May 2019, the applicant has also provided an Active Travel Zone (ATZ) assessment. This has been undertaken in accordance with TfL's updated Transport Assessment guidance and Policy T2 of the draft London Plan and sets out how the proposals support the Mayor's Healthy Streets and Vision Zero (relating to highway safety) approach. The PERS and ATZ assessments demonstrate that the following existing pedestrian routes require enhancement:

- Bunns Lane to the west via the railway and M1 underpass
- Bunns Lane to the east via the A1 underpass
- The M1 footbridge and railway underpass to Grahame Park Way
- The A1 pedestrian underpass to the south to Tithe Walk

410 Two potential walking and cycling routes exist between the site and Mill Hill Broadway – either via Bunns Lane; or via Flower Lane. The latter route provides a more welcoming and safe option for pedestrians and cyclists, given that it benefits from an existing zebra crossing and generous footway alongside Mill Hill Park, as well as quiet suburban side streets. In contrast, the existing western route along Bunns Lane to the west of the proposed new site access is constrained as it passes below the M1 and railway bridge structures, with the available footway along this pinch point limited to approximately 1 metre in both directions. This would not meet current TfL standards and significantly limits the ability for pedestrians to comfortably to pass each other in either direction, particularly where people are pushing buggies, walking with small children or using wheelchairs. This also route experiences traffic congestion during peak periods, with queuing vehicles backing up under the railway bridge from the Bunns Lane/Grahame Park Way mini roundabout, which impacts on the overall pedestrian and cycle experience.

411 The railway bridge is in Network Rail ownership and operational infrastructure constraints associated with the existing bridge structure and the limited carriageway space within the road in this location mean that it would not be feasible to provide additional space pedestrian or cycle facilities below the railway bridge. To the west of the railway bridge, the pedestrian crossing facilities at Grahame Park Way/ Bunns Lane roundabout, which also provides access between the site and Orion School Primary School and Woodcroft Park are in need of improvement. These works would need to be agreed with Barnet Council as highway authority. There is currently no pedestrian footway between the site and the existing ramp and stairs access, with this space dominated by the A1 service road and roundabout. The M1 footbridge and subsequent railway underpass also present a rather unwelcoming environment due to the noise levels associated with major transport infrastructure and lack of surveillance when crossing the elevated walkways and tunnel route. Similarly, the pedestrian routes to the east via Bunns Lane A1 underpass, the staircases on either sides of the A1 and the A1 subway at Tithe Walk are also unwelcoming and of a low environmental quality.

412 Barnet Cycling Campaign (BCC) have made representations objecting to the application relating to cycle provision and accessibility, which are summarised in the consultation section of this report. In response to this, the applicant has made a number of amendments to the plans, which are set out in their Transport Assessment Addendum (April 2019), as well as providing further clarification on how they consider the application has met the requirements of Barnet's Planning Brief.

413 In summary, the following pedestrian and cycle access improvements have been agreed as part of the revised application and would be secured either by condition or Section 106 planning obligation:

- a new primary pedestrian and cycle access on Bunns Lane – which would comprise a direct 3.5 metre wide stepped route, alongside a step-free route with three switch backs, which would be 2.5 metres wide and at a shallow 1:21 gradient, suitable for cyclists and wheelchair users.
- a secondary 3 metre wide pedestrian and cycle route to which would provide access onto the existing footway on Bunns Lane adjacent to the M1 underpass.
- a central route through the site – 'Mill Hill Walk' - which would be in excess of 3 metres, which would be treated as a shared space with vehicle access restricted to servicing and emergency vehicles.
- a 2.5 metre wide pedestrian and cycle route running along the existing service road adjacent to the site's western boundary with the M1.
- new pedestrian footway, crossing points and public realm improvements between the site and the pedestrian footbridge over the M1 and through onto the A1 (northbound) footway.
- widening of the existing footway along the A1 (northbound) alongside the site boundary to 2.5 metres, with the developer offering up ('dedicating') land for adoption by TfL to facilitate these works as the highway authority along this route (via Section 38 and 278 agreement).
- a new pedestrian route adjacent to the A1 which would be set back from the existing shared pedestrian and cycle route along the A1 and would be set within landscaping and provide access to the residential cores serving individual blocks.
- To enhance the legibility of the scheme, a wayfinding strategy would also be required as part of the Section 106 agreement, including provision of Legible London Signage, with an appropriate financial contribution.

414 In addition to this, the applicant has agreed to support the delivery of the enhancements to existing off-site pedestrian routes as part of the Section 106 agreement, either via financial contributions or via a Section 278 agreement, with details agreed prior to occupation:

- the M1 pedestrian footbridge;
- the railway underpass connecting Grahame Park Way to the M1 footbridge;
- Bunns Lane railway and M1 underpass;
- the A1 underpass at Tithe Walk;
- pedestrian and cycle crossing facilities at A1 Five Ways corner.

415 Operational infrastructure constraints mean that the available space to enhance these routes is significantly limited. Consequently, the scope of potential improvements sought under the above obligations is limited to qualitative enhancements, such as improvements to lighting, masonry or brickwork, painting/public art and public realm improvements, which would seek to make routes feel more welcoming and attractive in terms of safety and security. In each case, the Section 106 agreement would require the applicant bring forwards a more detailed scheme of works will need to be agreed in consultation with the respective highway.

416 GLA officers also recommend that the Section 106 should seek appropriate financial contribution towards enhanced pedestrian crossing facilities on Grahame Park Way, south of the mini roundabout with Bunns Lane, as this arm of the junction provides a key route between the site and the nearest primary school – The Orion Primary School. GLA officers note that these are not proposed as part of initial designs for the junction widening scheme, but enhancements are considered necessary to address the needs generated by this application in relation to pedestrian access and active travel. The applicant has agreed to make a financial contribution towards these works, the design and delivery of which would need to be progressed by Barnet Council as the Local Highway Authority, with a commensurate financial contribution agreed, taking into account the expected trip generation and the costs associated with this element of the scheme.

417 In addition to this, the applicant has proposed to provide a financial contribution of £100,000 towards the provision of a new lift and staircase on the eastern side of the A1. This would enable the delivery of an accessible step free access to the A1 southbound and Route 113 bus services towards Brent Cross and central London. This proposal is not supported by TfL due to the ongoing maintenance issues associated with this proposals and step free access exists via the existing A1 underpass. Consequently, this proposal has not been included in the Section 106 obligations.

418 On balance, subject to the proposed pedestrian and cycle access improvements being secured by the proposed condition and obligations, GLA officers consider that the application would comply with London Plan Policies 6.9, 6.10 and Policies T2 and T4 of the draft London Plan.

Public transport impact

419 The TA expects the development to generate 591 daily bus trips, of which 92 would be in the morning peak and 64 in the afternoon peak. This would generate additional levels of demand on Routes 113 and 221, with the greatest impact on the latter - equivalent to around one full bus load of passengers - which Route 221 will not be able to accommodate, given the existing level of demand on this service during peak times. Therefore, as mitigation, a total financial contribution of £475,000 to provide an additional return journey on this route for a period of five years (£95,000 per annum) would be secured through the Section 106 agreement. This contribution would be triggered prior to occupation of any residential units within the scheme so that the

necessary bus capacity is made available to enable mode shift from the outset and establish bus usage.

420 The application is expected to have a non-material impact on existing rail services given the level of additional demand per train that is identified in the applicant's TA and existing service provision. The TA expects a total of 356 daily trips by train, of which 34 are expected to be in the AM peak hour and 36 trips expected in the PM peak hour. GLA officers consider that this could be accommodated on the existing infrastructure. As such, subject to the above financial contributions being secured in respect of bus capacity, the impact of the application on public transport infrastructure is considered to be acceptable and, as such, the application complies with Barnet Local Plan Policies CS9, DM17 and London Plan Policy 6.3.

Bus stop access and infrastructure

421 To enhance the site's access to public transport, the revised application includes proposals to relocate bus stops on Bunns Lane serving the route 221 from their existing location east of the A1 underpass so that these would be next to the proposed new site access. In addition to this, the applicant has proposed to relocate the existing bus stop on the A1 (northbound) serving route 113 from its existing position to the north of the A1 bridge to a new layby and widened footway location adjacent to site and the proposed blocks alongside the A1. The applicant has stated that they would cover the full costs associated with relocating the bus stops via the section 106 agreement, which would then be concluded under a section 278 agreement if permission were granted. However, these proposals require TfL's approval and, on Bunns Lane, would also necessitate Barnet Council's agreement as the local highway authority.

422 As part of the revised TA, the applicant has undertaken a site specific PTAL assessment to examine the potential impact of these changes, alongside increases in the frequency of the route 221. This shows that in combination, the proposals would improve the site's overall connectivity to public transport services and shows that all of the proposed residential blocks would achieve PTAL 2 scores, with Block M which is closest to the new site access on Bunns Lane, achieving a PTAL score of 3.

423 Notwithstanding this, whilst TfL support the principle of providing additional bus stops serving the route 221 on Bunns Lane to the west of the A1 underpass and serving the 113 on the A1 northbound as this will support demand generated by this development, TfL are of the view that the existing bus stops on Bunns (east of the A1) should remain in their current location as they serve existing users and should not be relocated. Furthermore, although the applicant has indicated a potential location with their application material, the exact location or design has not been agreed at this stage and TfL and Barnet Council will need to work together with the applicant to ensure stops can work safely and are in accordance with TfL guidance⁸. These discussions are ongoing and whilst TfL have confirmed that the principle of the additional bus stops is acceptable, this is subject to further detailed design and taking into account the implications in terms of highways safety and bus operation and accessibility. This would be concluded as part of a subsequent Section 278 application under the Highways Act.

424 The applicant would be required to cover the full costs of providing and/or relocating bus stops and shelters, including any associated highways works, via the Section 106 Agreement. Given that there is a degree of uncertainty at this stage in terms of the deliverability and final design and location of the additional bus stops, GLA officers recommend that the Section 106 includes a cascade mechanism to ensure that where an agreement is not reached, following reasonable endeavours, the applicant is required to make an appropriate financial contribution to

⁸ <http://content.tfl.gov.uk/bus-stop-design-guidance.pdf>

enhancing the existing bus stop infrastructure, in line with the recommendations set out in the applicants PERS and TA.

Vehicle access

425 Vehicular access to the site would remain solely from the south utilising the existing one way slip road and separate ingress and egresses on the A1 (northbound). A two-way vehicular road is proposed to serve the site, which would make use of the existing route parallel to the M1 and continue through to the podium level courtyard via Mill Hill Walk with a second ramped entry/access point located between Blocks A and B at the southern entrance of the courtyard. Vehicle access to the internal courtyard would be restricted to deliveries, servicing, refuse collection vehicles and taxi drop-off/pick-up activities via on-site management and access control points in the form of either bollards and gates. The lower ground floor car park would be accessed from three separate points of entry/exit located on the existing western service road running alongside the M1 and residents would need to exit the site via this slip road, with through access via Mill Hill Walk restricted to ensure this space is not used as a through-route for private vehicles. This approach is acceptable and would be secured via planning condition.

Highways network impact

426 The applicant's updated TA estimates that the development would generate 71 and 73 private car movements in the AM and PM peak hours respectively (08.00 to 09.00 and 17.00 to 18.00). To establish the net impact of the development on the transport network, the applicant has compared this to the trip generation which could be expected were the existing retail and restaurant buildings on site fully occupied. This is an acceptable approach given the underutilised nature of the site at present compared to its historic use. The TA shows that, if fully operational, the existing use on site would generate 56 private car trips during the morning peak and 124 during the evening peak and therefore concludes that the net change in private car trips generated by the development is 15 additional trips during the morning peak and a net reduction of 51 trips during the evening peak.

427 Modelling has been undertaken as part of the TA for the following seven junctions listed below to assess existing baseline conditions (2016) and the future capacity in 2026, taking into account background traffic growth and that associated with approved developments nearby. The TA then considers a 'with development' scenario for 2026 to assess the net impact of traffic growth generated by the scheme. Modelling reflects the fact that all vehicles leaving or entering the site would need to do so via existing vehicle access on the A1 (northbound). The 2016 baseline demonstrates that those highlighted below in bold are already operating at capacity in either one or both of the morning and evening peak times, resulting in queuing and delays:

- 1) The Broadway / Flower Lane Junction
- 2) Bunns Lane / Flower Lane Junction
- 3) Fiveways Corner
- 4) Mill Hill Circus**
- 5) Bunns Lane/Grahame Park Way Mini Roundabout**
- 6) The Broadway/Bunns Lane/Hale Lane Mini Roundabout**
- 7) Bunns Lane/Page Street/Pursley Road Mini Roundabouts**

428 The TA shows that by 2026, all of the junctions examined will have reached or exceeded their capacity and will experience queuing and delays as a result of background traffic growth and approved developments. The Bunns Lane/Grahame Park Way mini roundabout is over capacity, even when account is taken of Barnet Council's proposed junction enhancement scheme.

429 Overall, the modelling demonstrates that relative parking constraints applied on site, together with the restricted vehicle site access arrangements on the A1 would to some extent limit the impact of the development on the performance of the highways network, with the scheme having a negligible or non-material impact on most of the junctions tested. The TA shows that the development would have a minor adverse impact on Mill Hill Circus, as all traffic leaving the site would have to turn left onto the A1 northbound and use this junction, with minor adverse impacts also identified on the Bunns Lane/Page Street/Pursley Road mini roundabouts.

430 Separate to this planning application, TfL has reviewed options to enhance capacity at Mill Hill Circus during 2016 and 2018; however, the design developed was not considered to accord with the Healthy Streets Approach set out in Mayor's Transport Strategy. TfL acknowledges that this is a congested junction, however, in terms of highway capacity mitigation, no financial contributions are being sought by TfL from the applicant, subject to the application supporting measures that restrain car parking and traffic growth and promote public transport use, walking and cycling.

431 Preliminary modelling and design work has been undertaken by Barnet Council to establish the most viable junction remodelling strategy the Bunns Lane/Page Street/Pursley Road mini roundabouts. Given the importance of these junction enhancement works to the reliability of the 221 bus route and the additional route proposed as part of this application and its role in ensuring sustainable transport usage within the site, GLA officers consider that an appropriate financial contribution should be sought from the applicant towards the implementation of the Council's preferred junction enhancement strategy.

432 At the time of writing this report, the Council's preferred option had not been costed and finalised; however, if permission were to be granted, a financial contribution would need to be agreed following further discussion between the Council, the applicant and GLA and TfL, with the level of payment to be required to be commensurate with the level of impact arising from the development, taking into account the TA and increased bus frequencies proposed. Subject to an appropriate contribution being secured through the Section 106, the development would be acceptable in terms of highways impact.

Transport for London and Highways England highways infrastructure assets

433 Both TfL and Highways England have expressed concern that proposed demolition, groundworks, site clearance and construction works and machinery, including piling, foundations and drainage alterations, could potentially impact the structural integrity and safe operation of their highway assets – namely the A1 and M1 – including the retaining structures supporting landscape embankments adjacent to these major roads and supporting bridge structures. Given then the strategic importance of both the A1 and the M1 to London it is necessary to ensure that the proposed development will not impinge unacceptably upon their operation. To address this, specifically worded planning conditions are recommended in relation to TfL and Highways England infrastructure asset protection. This would require the applicant to submit a detailed engineering and construction design and methods statement which would need to be submitted and approved by the local planning authority, in consultation with both TfL and Highways England as appropriate, prior to any groundworks, demolition or construction work being undertaken. The protection measures would also be secured via a Construction Environmental Management and Logistics Plan condition, with respect to which both parties would also be consultees. Furthermore, a condition has been included to ensure that further details of the proposed environmental barrier alongside the M1 is submitted and agreed, in consultation with Highways England, as requested in their representation.

434 Subject to these specific requirements of this condition being met and a more detailed scheme of works being agreed with the relevant parties, GLA officers are satisfied that the structural integrity of the highway would not be compromised as a result of this conditional planning permission, with appropriate planning controls in place to ensure that the impacts are fully considered and agreed prior to the proposed works, in accordance with Policies CS9 and DM17 of the Barnet Local Plan (2012) and Policies 6.1 and 6.3 of the London Plan (2016).

Highways safety and solar glare

435 As set out in the consultation summary section of this report, Highways England have raised concerns regarding the findings of the applicant's solar glare assessment (2019) and the report findings which state that solar dazzle could occur on the M1 southbound and northbound sections, albeit these impacts are considered to be highly localised and minor. The applicant has stated that this assessment is based on the entire development being of a reflective material so should be considered to represent a 'worst-case scenario' and that the final design and specification of facades would incorporate low-reflective glazing on windows, balconies and winter gardens and panels. The applicant has also stated that additional shading devices could be used to control and limit solar glare from affecting motorists, should this be required, albeit this would necessitate revisions to the submitted plans via either a Section 73 or Section 96A application depending on the scale of changes proposed.

436 To ensure this issue is fully examined and mitigated, a planning condition is proposed, in line with Highways England's representation. This would require the applicant to submit a more detailed scheme to control and limit the effects of solar glare including specified mitigation measures and modelling of residual solar reflection levels and would need to be approved, in consultation with Highways England prior any superstructure works commencing. Whilst TfL have not raised similar comments on the application in respect of this issue, GLA officers consider that this matter should also be examined along the A1 given its proximity to the proposed buildings and the similarity of the issues raised. It should be noted that a standard condition covering the materials proposed for building elevations, balconies, winter gardens and privacy screens is also proposed. Subject to an agreed design solution being tested and agreed via this condition, GLA officers consider that this issue can be appropriately mitigated, in accordance with Policies CS9 and DM17 of the Barnet Local Plan (2012) and Policies 6.1 and 6.3 of the London Plan (2016).

Deliveries, servicing, construction and travel planning

437 Deliveries for residents will also take place within the internal podium courtyard, and would be orchestrated by site management/concierge, with an on-site post/sorting office facility provided. Deliveries and servicing activities of non-residential uses are proposed to take place outside of peak times and would take place from either a dedicated servicing area located at the southern end of the site, or within designated loading areas within the internal courtyard. Similarly, refuse collections would also take place from various designated collection points within the public courtyard, with an on-site management team consolidating refuse for collection. These arrangements will help to reduce vehicle trips to and from the site and will be set out in a more detailed Delivery and Servicing Plan (DSP) which would be required by condition prior to occupation, in accordance with the London Plan Policy 6.3 and Policy T7 of the draft London Plan.

438 In addition, an operational waste management and recycling strategy (OWMRS) would be required by condition prior to any superstructure works being undertaken. The applicant has submitted an outline OWMRS which is acceptable in terms of the proposed capacity, design and location of storage facilities. The outline OWMRS states that non-residential and residential waste and recycling would be transferred by site management from lower ground floor level storage

facilities to collection points along the western service road and southern site entrance to ensure its efficient collection and following discussions with Barnet Council. Furthermore, prior to any groundworks, demolition or construction work being undertaken, a Construction Environmental Management Plan (CEMP) would also be required prior to any groundworks, which would set out in detail measures in relation to construction related traffic management and logistics, in line with TfL's Construction Logistics Plan Guidance.

439 In line with Barnet Council's planning committee report and in accordance with Barnet Local Plan Policy DM17, Barnet Council's Planning Obligations SPD, and London Plan Policies 6.1 and 6.13, the Section 106 Agreement would secure the following obligations and incentives in relation to the Residential Travel Plan:

- with monitoring contributions of £20,000,
- travel plan incentives for each first household, capped at a maximum of £253,200 in total, with each first household to be offered the option of selecting two of the following three incentives (to a maximum of £300):
 - Oyster card with £150 credit
 - Cycle shop voucher to the value of £150
 - Car club credit/membership to the value of £150

440 A Commercial Travel Plan would also be secured, with monitoring contributions of £15,000.

Conclusion on transport matters

441 The reduced level of parking provision complies with the maximum standards in the London Plan and Barnet Local Plan and would strike an appropriate balance between accommodating private car use in a low PTAL suburban location whilst promoting sustainable and active travel and would limit the impact of the development on the local highway network, with appropriate mitigation measures secured to ensure potential issues in terms of overspill parking could be appropriately addressed through the introduction of additional Controlled Parking Zone (CPZ) controls. An appropriate package of transport mitigation measures is proposed in terms of walking, cycling, bus capacity improvements, improved access to bus stops, together with travel plan incentives. Cycle parking provision complies with the standards in the draft London Plan. The highways impacts of the proposals in terms of traffic congestion, safety, deliveries, servicing, construction and access are acceptable. Subject to the transport mitigation measures being secured, the application supports the transport objectives set out in the Pentavia Retail Park Planning Brief and accords with the transport policies in the London Plan, draft London Plan and Barnet Local Plan.

Impact on social infrastructure

442 London Plan Policy 3.16 and Policy S1 of the draft London Plan support the provision of adequate social infrastructure as part of new developments and states that facilities should be accessible by walking, cycling and public transport. London Plan Policy 3.18 and Policy S3 of the draft London Plan supports the provision of childcare facilities to meet growing demand. Barnet Council Local Plan Policy DM13 supports new community and educational uses where they are accessible by walking, cycling and public transport and would do not significantly impact road safety or traffic flow.

443 As part of the public consultation on the application and subsequent revisions, as number of objections made on the issue of capacity of local social infrastructure (particularly school and

health facilities) and the impact of the application, with objectors also concerned that, bar a small nursery, the application does not propose any additional social infrastructure.

444 The applicant's updated Environmental Statement (ES) has modelled the impact of the development on social infrastructure in the area, including primary and secondary schools and healthcare facilities, taking into account the existing and future levels of demand and capacity and cumulative effects associated with other extant planning permissions expected to be brought forwards in the area. This assessment takes into account the Council's existing programme for providing new and expanded primary and secondary schools capacity in the area to 2024.

Primary and secondary schools

445 According to the applicant's ES, the development is expected to generate 1,431 residents. In terms of child yield and the impact on local schools, the applicant's ES using Barnet Council's SPD child yield calculator to estimate that the development would generate 76 pre-school age (0-3 year olds), 54 primary school age children (aged 4-10) and 21 secondary school age children (aged 11-15 years).

446 The ES assesses the potential for existing primary and secondary schools to cater for this additional demand using the most recently published school admissions and school Census data (2018). Whilst this demonstrates that there would be sufficient surplus capacity in terms of secondary schools, the ES states that primary schools within a 1km walking catchment would not have sufficient surplus capacity available to meet this level of demand and the limited capacity that does currently exist is likely be taken up by the time the development is fully built out. As such, GLA officers consider that mitigation is required in terms of the impacts in relation to primary school capacity and this is therefore secured via Section 106, in accordance with the formula set out in Barnet Councils SPD, which states that the cost per pupil place for new schools/expanded schools within the borough is an average of £21,400 per pupil place.

$£21,400 \times 54 \text{ places} = £1,155,600$

447 The additional demand for childcare capacity would be met on-site through the provision of 297 sq.m. of D1 community use, which is expected to accommodate a nursery. The proposed level of floorspace in D1 community use would be secured by condition.

Healthcare

448 The ES includes an assessment of the impact on health facilities and calculates that the scheme would generate demand for 0.8 GP services, based on the HUDU guidance of 1,800 patients per GP. The ES concludes that there is capacity locally to meet this additional healthcare demand, with local GPs operating below this HUDU standard.

Conclusion – impact on social infrastructure

449 Subject to the above financial contributions being secured to mitigate the impact of the development on primary school capacity in the local area, the application is considered acceptable in terms of its impact on social infrastructure.

Mitigating the impact of the development through planning obligations

450 Regulation 122 of the Community Infrastructure Levy Regulations 2010 states that a section 106 planning obligation may only constitute a reason for granting planning permission for the development if the obligation is necessary to make the development acceptable in planning

terms; directly related to the development; and fairly and reasonably related in scale and kind to the development. These are statutory tests.

451 The NPPF states that “Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition.”

452 At the regional level, London Plan Policy 8.2 sets out the Mayor’s priorities for planning obligations, and states that affordable housing; supporting the funding of Crossrail where this is appropriate; and other public transport improvements should be given the highest importance.

453 Barnet Local Plan Policy CS15 seeks the use of planning obligations and other funding mechanisms to support the delivery of infrastructure facilities and services to meet needs generated by new development and mitigate the impacts. Barnet’s Planning Obligations SPD (2013) provides further guidance on how the Council will secure planning obligations, where these are necessary to mitigate the impacts of development.

454 Pursuant to the consideration within the previous sections of this report, and in line with the policy context set out above, GLA officers propose to secure several planning obligations required to appropriately mitigate the impact of this development, which are set out in full at paragraph 9 of this report. In doing so, the pooling restriction in regulation 123 of the CIL Regulations 2010 has been considered and GLA officers are confident that none of the obligations in the Section 106 agreement will be affected as they either will not be spent on “infrastructure” as defined in the regulations or will be sufficiently narrowly described in the s106 agreement. A full list of the obligations is provided under paragraphs 10-13 above, and where appropriate there is detailed consideration given in the relevant topic section of the report. Where appropriate, GLA officers have provided an additional commentary below to support the consideration within this report and to inform the detailed drafting of a Section 106 legal agreement.

Affordable housing

455 As discussed in the housing section of this report, the Section 106 agreement would secure the applicant’s ‘baseline’ offer of 41% affordable housing by unit and habitable room, in accordance with the proposed policy compliant tenure mix, with appropriate obligations in relation to the definition, eligibility, affordability and perpetuity of affordable housing units across the various tenures. An early stage review mechanism and appropriate phasing triggers are set out in the Section 106 to incentivise the delivery of the site and ensure the phased delivery of affordable housing by block. In addition, a ‘with grant scenario’, together with the arrangements for the management of LAR units by a Registered Provider, a nominations agreement and obligations in relation to service charges for LAR and LSO units would be secured. The Section 106 would also secure Build to Rent through a covenant, with necessary clawback and management plan. GLA officers consider that these obligations are necessary to ensure compliance with the London Plan, draft London Plan, the Mayor’s Affordable Housing and Viability SPG and Barnet Local Plan.

Transport

456 The following transport obligations would be secured by legal agreement:

- a financial contribution of £475,000 for local bus service enhancements - to mitigate the impact of the development on local bus services - specifically Route 221 – and fund an additional return journey on this service for a period of five years, in accordance with London Plan Policy 6.3.

- delivery of two new pedestrian and cycle accesses on Bunns Lane, together with the proposed new footway and crossing facilities on the existing A1 slip road linking to the M1 footbridge, together with the delivery of the central north-south route referred to as 'Mill Hill Walk' and the proposed pedestrian and cycle route alongside the M1 boundary – to ensure the integration of the site with the surrounding pedestrian and cycle infrastructure, in accordance with the Pentavia Retail Park Planning Brief (2016).
- the provision of two new bus stops and shelters on Bunns Lane and the re-location of one bus stop on the A1 (northbound) – to improve access to the public transport network, in line with the objectives of the Pentavia Retail Park Planning Brief (2016) and in accordance with London Plan Policies 6.1, 6.3, 6.7 and 6.10.
- qualitative enhancements to the Grahame Park Way railway underpass, M1 footbridge, Bunns Lane railway bridge and M1 underpass, Bunns Lane A1 underpass and the A1 underpass at Tithe Walk, in line with the objectives of the Pentavia Retail Park Planning Brief (2016) and in accordance with London Plan Policies 6.1, 6.3, 6.9 and 6.10.
- a commensurate financial contribution towards pedestrian and cycle crossings at A1 Five Ways Corner, with the level of contribution towards this proposed scheme to be determined, taking into account the likely impact from the increase in trips associated with the development and in accordance with London Plan Policies 6.3, 6.9 and 6.10.
- a commensurate financial contribution towards the proposed junction enhancements at Bunn's Lane/Pursley Road/Page Street roundabout, taking into account the likely impact from the increase in trips associated with the development at this location and the increase in bus services proposed at this location, in accordance with London Plan Policies 6.3, 6.9 and 6.10.
- Financial contributions toward enhanced pedestrian crossing facilities on Grahame Park Way (south of mini roundabout with Bunn's Lane to provide enhanced access to the Orion Primary School) - to ensure the provision of a safe and more convenient crossing facility for residents (including disabled people and those with mobility need and to address potential road danger and enhance the overall quality of the existing crossing facilities in this location given its role as a route to the closest primary school to the site, in accordance with London Plan Policy 6.1, 6.3, 6.7, 6.10, Barnet Local Plan Policy CS9 and DM17 and the Pentavia Retail Park Planning Brief (2016).
- Commercial travel plan, with monitoring contributions of £15,000, together with a residential travel plan, with monitoring contributions of £20,000 and travel plan incentives for each first household (only), capped at a maximum of £253,200 in total, with each first household to be offered the option of selecting two of the following three incentives (to a maximum of £300) - to encourage modal shift and the use of sustainable modes of transport, in accordance with London Plan Policies 6.1 and 6.13, Barnet Local Plan Policy DM17 and Barnet's Planning Obligations SPD (2013):
 - Oyster card with £150 credit
 - Cycle shop voucher to the value of £150
 - Car club credit/membership to the value of £150
- 5 car club spaces - to promote low levels of car ownership, in accordance with London Plan Policy 6.11 and as mitigation for the application falling short of the air quality natural standard in respect of transport emissions.
- A wayfinding strategy and Legible London signage - to support walking and cycling, in accordance with London Plan Policies 6.9 and 6.10.
- Funding for two rounds of public consultation on a local Controlled Parking Zone (CPZ) and the associated initial implementation costs associated with traffic management

order and replacement signage and road markings, together with a restriction on future residents being eligible for permit within this CPZ - to mitigate the potential for overspill parking and parking stress, in accordance with Barnet Local Plan Policy DM17 and the Pentavia Retail Park Planning Brief (2016).

Other obligations:

- Financial contribution of £1,155,600 towards improvements in primary school capacity in the local area - to mitigate the impact of the development on existing primary school infrastructure, as set out in the applicant's Environmental Statement and in accordance with Barnet's Planning Obligations SPD (2013) and London Plan Policy 3.16.
- Completion and ongoing maintenance of all public open spaces and public routes, with continued unrestricted public access to the proposed pedestrian and cycle routes within the scheme
- Carbon off-set payment of £1,025,649 (subject to a revised energy strategy being submitted) – to ensure compliance with the zero carbon standard set out in the London Plan, draft London Plan and GLA energy assessment guidance (2018).
- Provisions to future proof the site to enable connection to a district heat network to ensure compliance with London Plan Policy 5.5.
- Local employment, training and skills obligations covering the construction period, in accordance with Barnet's Planning Obligations SPD (2013) and Barnet's Delivering Skills, Employment, Enterprise and Training from development through s106 SPD (2014).
- Section 106 monitoring fee, dispute resolution provisions and provisions for repayment of unspent financial contributions.

Legal considerations

457 Under the arrangements set out in Article 7 of the Order and the powers conferred by Section 2A of the Town and Country Planning Act 1990 the Mayor is the Local Planning Authority (LPA) for the purposes of determining this planning application ref: 01508/A/P6

458 Section 35 of the Greater London Authority Act 2007 inserts section 2F into the Town and Country Planning Act 1990 a requirement that for applications the Mayor takes over, the Mayor must give the applicants and the LPA the opportunity to make oral representations at a hearing. He is also required to publish a document setting out:

- who else may make oral representations;
- the procedures to be followed at the hearing; and,
- arrangements for identifying information, which must be agreed by persons making representations.

459 The details of the above are set out in the Mayor's Procedure for Representation Hearings which reflects, as far as is practicable, current best practice for speaking at planning committee amongst borough councils.

460 In carrying out his duties in relation to the determination of this application, the Mayor must have regard to a number of statutory provisions. Listed below are some of the most important provisions for this application.

461 Section 70(2) of the Town and Country Planning Act 1990 (as amended) provides that in dealing with such an application the authority shall have regard to:

- a) The provisions of the development plan, so far as material to the application;
- b) Any local finance considerations, so far as material to the application; and
- c) Any other material consideration.

462 Section 70(4) defines “local finance consideration” as:

- a) A grant or other financial assistance that has been, or will or could be, provided to a relevant authority by a Minister of the Crown; or
- b) Sums that a relevant authority has received, or will or could receive, in payment of Community Infrastructure Levy.

463 In this context “grants” might include the Government’s “New Homes Bonus” - a grant paid by Central Government to local councils for increasing the number of homes and their use.

464 These issues are material planning considerations when determining planning applications or planning appeals.

465 Furthermore in determining any planning application and connected application, the Mayor is required by section 38(6) of the Planning and Compulsory Purchase Act 2004 to determine the application in accordance with the Development Plan (i.e. the London Plan and the adopted Local Plan) unless material considerations indicate otherwise.

466 Other guidance, which has been formally adopted by Barnet Council and the GLA (e.g. Supplementary Planning Documents and Supplementary Planning Guidance), will also be material considerations of some weight (where relevant). Those that are relevant to this application are detailed in this Representation Hearing report.

467 Officers are satisfied that the current report to the Mayor has had regard to the relevant provision of the Development Plan. The proposed section 106 package has been set out and complies with the relevant statutory tests, adequately mitigates the impact of the development and provides necessary infrastructure improvements.

468 As regards Community Infrastructure Levy (CIL) considerations, the Mayoral CIL payment associated with this development is estimated to be up to £1,353,110, whilst the Barnet CIL payment is estimated to be £8,237,400. Both figures take into account the expected relief from the affordable housing floorspace.

469 In accordance with his statutory duty in section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 the Mayor shall have special regard to the desirability of preserving Listed Buildings, their settings and any features of special architectural or historic interest which they possess. The Mayor is also required to give special attention to the desirability of preserving or enhancing the character or appearance of the conservation areas which may be affected by the proposed development (section 72 of the of the Planning [Listed Buildings and Conservation Areas] Act 1990). These matters have been addressed within earlier sections of the report.

470 Where the Mayor takes over an application, he becomes responsible for the section 106 legal agreement, although he is required to consult the relevant borough(s). In this instance, there have been a series of lawyer led meetings to discuss the section 106 content, and it has progressed on a number of key issues, whilst others remain outstanding at this point in time. Both the Mayor and the borough are given powers to enforce planning obligations.

471 When determining these planning applications, the Mayor is under a duty to take account of the provisions of the Human Rights Act 1998 as they relate to the development proposal and the conflicting interests of the applicants and any third party affected by, or opposing, the application, in reaching his decision. Planning decisions on the use of land can only be taken in line with the Town and Country Planning Acts and decided in accordance with the development plan unless material considerations indicate otherwise.

472 The key Articles to be aware of include the following:

- (a) Article 6 - Right to a fair trial: In the determination of his civil rights and obligations... everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law.
- (b) Article 8 - Right to respect for private and family life: Everyone has the right to respect for his private and family life, his home and his correspondence.
- (c) Article 1 of the First Protocol - Protection of property: Every person is entitled to the peaceful enjoyment of his possessions.

473 It should be noted, however, that most Convention rights are not absolute and set out circumstances when an interference with a person's rights is permitted i.e. necessary to do so to give effect to the Town and Country Planning Acts and in the interests of such matters as public safety, national economic well-being and protection of health, amenity of the community etc. In this case this Representation Hearing report sets out how this application accords with the Development Plan.

474 Regulation 122 of the Community Infrastructure Levy Regulations 2010 states that a section 106 planning obligation may only constitute a reason for granting planning permission for the development if the obligation is necessary to make the development acceptable in planning terms; directly related to the development; and fairly and reasonably related in scale and kind to the development. These are now statutory tests.

475 The Equality Act 2010 provides that in exercising its functions (which includes the functions exercised by the Mayor as Local Planning Authority), that the Mayor as a public authority shall amongst other duties have due regard to the need to a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited under the Act; b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it; c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

476 The protected characteristics set out in the Equality Act are: age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation. The Equality Act acknowledges that compliance with the duties set out may involve treating some persons more favourably than others, but that this does not permit conduct that would otherwise be prohibited under the Act.

477 Officers are satisfied that the application material and officers' assessment has taken into account the equality and human rights issues referred to above. Particular matters of consideration have included provision of accessible housing and parking bays, the provision of affordable and family housing and the protection of neighbouring residential amenity.

Conclusion and planning balance

478 As detailed above Section 38(6) of the Planning and Compensation Act 2004 requires matters to be determined in accordance with the Development Plan unless material considerations indicate otherwise.

479 When assessing the planning application, the Mayor is required to give full consideration to the provisions of the Development Plan and all other material considerations. He is also required to consider the likely significant environmental effects of the development and be satisfied that the importance of the predicted effects and the scope for reducing them, are perfectly understood.

480 When considering the proposals, GLA officers have applied the approach required in section 16 of the NPPF and had regard to the statutory duties relevant to the protection of heritage assets.

481 As set out above, the application conflicts with the Development Plan as tall buildings are proposed in a location which is outside of the ‘strategic locations’ identified in Barnet Local Plan Policies CS5 as being potentially suitable for tall buildings, with the site being a location in which Barnet Local Plan Policy DM05 states that proposals for tall buildings (8 storeys and more/ 26 metres in height and more) will not be supported. The application therefore represents a departure from the Local Plan. Accordingly, as required by Section 38(6) of the Planning and Compensation Act 2004, other material considerations must demonstrably exist to justify this departure.

482 Having reviewed Barnet Council’s 5 year housing land supply assessment, as set out in the Council’s most recently published housing trajectory and Annual Monitoring report (2016/17), GLA officers consider the Barnet Local Plan (2012) to be up to date for the purpose of paragraph 213 and 11 of the NPPF and applying the presumption in favour of sustainable development, with relevant policies relating to housing supply given due weight in determining this application.

483 Notwithstanding this, in this instance, GLA officers consider that there are strong material considerations to justify a departure from Barnet’s Local Plan Policies CS5 and DM05 in respect of tall buildings, taking into account the specific impacts of the development in this location; the scheme’s overall compliance with the design criteria relevant to proposals for tall buildings; and the wider public benefits in terms of the scheme’s substantial contribution towards achieving both local and strategic targets for overall and affordable housing and optimising the development of an under-utilised, brownfield site. London Development Database monitoring shows that the level of net housing completions within Barnet (including net conventional and net non-conventional housing supply) has not met the relevant annual monitoring targets in the London Plan. Furthermore, affordable housing completions within the borough as a percentage of net conventional housing completions during the same period have comprised an average of 21%, which is significantly below the Local Plan target of 40%. Table 23 sets out conventional housing completions and affordable housing completions across London and also demonstrates the strategic need for the scale of affordable and market housing proposed in this instance.

Table 21 – LB Barnet net housing completions (both conventional and non-conventional supply and long-term vacant homes returning to use)

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	5 year total
Barnet London Plan housing target	2,255	2,255	2,255	2,349	2,349	11,463
Net homes delivered	1,391	998	1,209	1,746	2,279	7,623
Vacant homes returning to use	-41	7	-120	149	52	47
Net Total Housing (all forms of supply)	1,350	1,005	1,089	1,895	2,331	7,670
Percentage of target	60%	45%	48%	81%	99%	67%

Table 22 – LB Barnet net affordable housing completions as a percentage of conventional housing completions

	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	5 year total
Net conventional housing completions	1,074	1,385	1,724	2,290	2,360	7,876
affordable housing completions	285	344	205	470	341	1,645
affordable housing as a % of conventional supply	27%	25%	12%	21%	14%	21%

Table 23 – London-wide net affordable housing completions as a percentage of conventional housing completions

	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	5 year total
Net conventional housing completions	26,749	28,738	35,358	40,560	31,851	163,256
affordable housing completions	6,855	6,237	7,007	6,890	4,703	31,692
affordable housing as a % of conventional supply	26%	22%	20%	17%	15%	19%

484 The proposed scheme would provide 844 homes (of which 41% would be affordable), which, if completed, would equate to 35% of Barnet’s annualised housing monitoring target in the current London Plan and 27% of the draft London Plan target, on an annualised basis. The application proposes 345 affordable homes across a range of tenures, including 94 London Affordable Rent units, 131 Discount Market Rent units, 57 London Living Rent units, 63 London Shared Ownership units. The overall number of affordable homes proposed would therefore exceed the total number of affordable homes completed in Barnet during the most recent year of monitoring (2017/18). As such, GLA officers consider that the site would make a significant contribution towards the achievement of the Council’s housing targets and in meeting local and strategic pan-London need for overall and affordable housing and that, on balance, this overriding public benefit should be given significant material weight when balancing the range of planning considerations, including specifically the scheme’s departure from the Development Plan in respect of tall buildings.

485 Turning to the impact of the scheme and the design criteria for tall buildings, the segregated nature of the site and its surrounding topography as well as the design quality of the scheme would mean that the character of the surrounding area would not be adversely affected by the proposals. The application would not adversely impact local or strategic views, Barnet’s skyline and would not harm the significance of the nearby Watling Estate Conservation Area or Mill Hill Conservation Area or any other heritage assets. The proposed tall and large buildings in this location would not give rise to any unacceptable adverse impacts on local microclimatic in terms of wind, pedestrian comfort levels or solar glare. The varied height and massing of the scheme, including the architectural approach and the proposed use of high quality brick and stone materials would ensure the provision of a good quality, visually distinctive and cohesive scheme which responds appropriately to the surrounding context. The design and layout of the scheme is well-considered and fully optimises the development potential of the site, whilst successfully resolving the environmental and site access constraints associated with the site’s proximity to major roads. The potential for the site to integrate with the surrounding area has been maximised given the

existing site constraints and the proposed landscaping, public realm and amenity spaces would be of a high quality and appropriately overlooked by active frontages.

486 As such, whilst the proposal would mark a departure from the prevailing form and density of development in the locality, and a departure from Barnet Local Plan policy concerning appropriate locations for tall buildings, the height and massing of the development is considered acceptable in this instance and would not give rise to any harm. On this basis, the application accords with London Plan Policies 3.5, 3.6, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, the Housing SPG (2016), Policies D1, D2, D3, D4, D5, D6, D7, D8, D11 of the draft London Plan and generally accords with Barnet Local Plan Policies DM01, DM02, DM03, DM05, CS5, as well as the overall urban design objectives set out in the Pentavia Retail Park Planning Brief (2016). Where there is clearly a conflict with Barnet Local Plan Policies CS5 and DM05 and the Pentavia Retail Park Planning Brief (2016) in terms of the site's location and the proposal for tall buildings, GLA officers are satisfied that the proposed tall buildings are acceptable and that the other material considerations set out above outweigh the scheme's conflict with the above Development Plan policies and supporting guidance.

487 In preparing this report, officers have taken into account the likely environmental impacts and effects of the development and identified appropriate mitigation action to be taken to reduce any adverse effects. In particular, careful consideration has been given to the proposed conditions and planning obligations which would have the effect of mitigating the impact of the development.

488 This report has considered the material planning issues associated with the proposed development in conjunction with all relevant national, regional and local planning policy, and has found that the proposed development is acceptable in terms of land use principles (including mixed use development, employment and residential uses); housing (including delivery of affordable housing, tenure, mix, density, quality); design (including urban design, public realm, play space); historic environment; inclusive design; residential amenity (including daylight and sunlight, overshadowing, privacy/overlooking; noise/disturbance); sustainable development (including climate change mitigation and adaptation, microclimate, ecology, trees and urban greening, flood risk and sustainable urban drainage); other environmental issues (including air quality, contaminated land and waste management); transport, including parking provision and socio-economic issues, including the impact on social infrastructure; and; mitigating the impact of development through planning obligations and conditions. When considered overall the development complies with the development plan and there are no material considerations which indicate that planning permission should not thereby be granted.

489 Accordingly, the recommendations set out at the beginning of this report are proposed.

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