

# Gallions Housing Association, Abbey Wood

in the London Borough of Greenwich

planning application no.10/1092/F

## Strategic planning application stage 1 referral (new powers)

Town & Country Planning Act 1990 (as amended); Greater London Authority Acts 1999 and 2007; Town & Country Planning (Mayor of London) Order 2008

## The proposal

Demolition of existing office building and the construction of 267 residential units, comprising 51 one-bedroom, 146 two bedroom and 27 three-bedroom flats; 23 three bedroom, 18 four-bedroom and 2 five-bedroom houses, contained in seven blocks ranging between two and six storeys, improved site access, associated car parking and landscaping provision.

## The applicant

The applicant is the JTS Partnership LLP acting on behalf of **Gallions Housing Association**, and the architect is the **BPTW Partnership**.

## Strategic issues

The principal issues for consideration are: acceptability of **the principle** of developing the site for **residential use**; the **density, mix** of unit sizes and **quality** of the accommodation; the proportion and tenure split of **affordable housing**; the **design** and architectural quality of the scheme; inclusive design and **access**; **transport/parking** issues; and the **climate change** and **sustainable development** implications of the development (including **energy** and **flood risk**).

## Recommendation

That Greenwich Council be advised that whilst the application is broadly acceptable in strategic planning terms it does not comply with the London Plan, for the reasons set out in paragraph 105 of this report; but that the possible remedies set out in paragraph 107 of the report could address these deficiencies.

## Context

1 On 28 May 2010, the Mayor of London received documents from Greenwich Council notifying him of a planning application of potential strategic importance to develop the above site for the above uses. Under the provisions of The Town & Country Planning (Mayor of London) Order 2008, the Mayor has until 2 July 2010 to provide the Council with a statement setting out whether he considers that the application complies with the London Plan, and his reasons for taking that view. The Mayor may also provide other comments. This report sets out information for the Mayor's use in deciding what decision to make.

2 The application is referable under Category 1A of the Schedule to the Order 2008: *“Development which comprises or includes the provision of more than 150 houses, flats, or houses and flats”*.

3 Once Greenwich Council has resolved how it wishes to determine the application, it is required to refer it back to the Mayor for his decision as to whether to direct refusal; take it over for his own determination; or allow the Council to determine it itself.

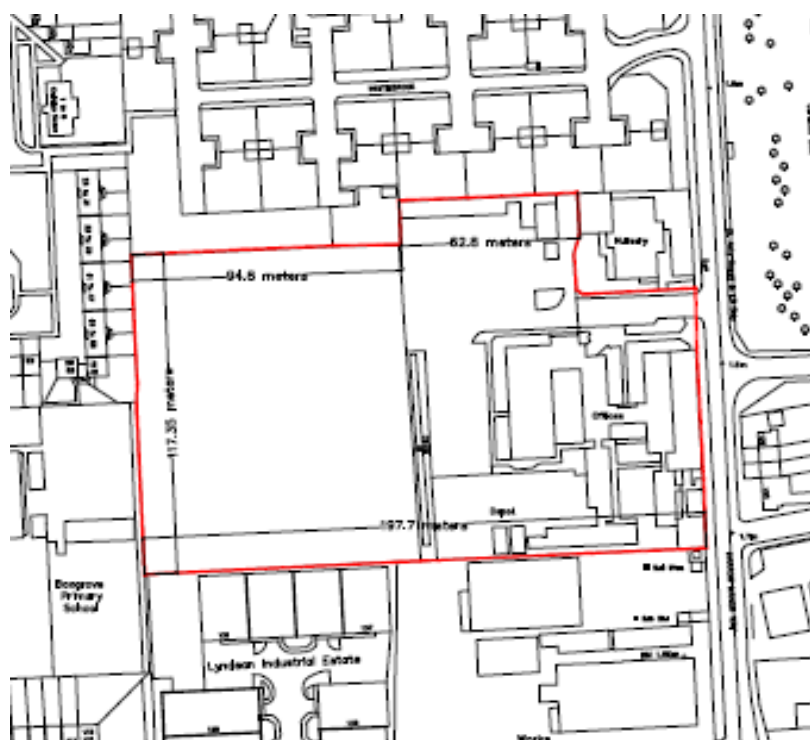
4 The Mayor of London’s statement on this case will be made available on the GLA website [www.london.gov.uk](http://www.london.gov.uk).

## Site description

5 The application boundary is formed by the amalgamation of two rectangular sites, totalling 2.28 hectares in area. It is situated to the immediate west of the A.2041 Harrow Manor Way, from which vehicular access to the site is derived, and which defines the borough boundary between Greenwich on the west and Bexley on the east.

6 The western side is a fenced off area of open scrubland; whilst the eastern side is occupied by one and two-storey buildings of temporary construction and a hard-surfaced area that make up the local area offices, depot and service yard of Gallions Housing Association. The two sides are separated along their southern half by an open ditch that runs in a north-south direction.

7 Most of the northern boundary abuts the Thistlebrook Travellers site, which comprises a mixture of bungalows, mobile homes and single-storey service blocks; and is one of the largest of its kind in London. The western boundary of the site adjoins the single-storey buildings of Boxgrove Primary School and the rear gardens of two-storey terraced homes; whilst its southern boundary abuts two industrial sites, including a vacant cable works and the Lyndean Industrial Estate, which consists of one and two-storey commercial buildings.



**Site location map \***

8 The surrounding area is of mixed-use but predominantly residential character. The Abbey Wood surface rail station and town centre are situated approximately 400 metres to the south of the site.

9 Harrow Manor Way is a borough road between Thamesmead and Abbey Wood. The site is 750 metres south of the A2016 Eastern Way junction, which forms part of the Strategic Road Network (SRN), with the nearest section of the Transport for London Road Network (TLRN), i.e. the A205, located over one kilometre west of the development. The site is located 360 metres north of Abbey Wood national rail station. The latter offers connections towards Central London, with interchange opportunities onto the Docklands Light Railway at Woolwich Arsenal and Greenwich. Seven bus services operate near to the site, providing links to a variety of destinations in south and south-east London. As such, it has been demonstrated that the site has a moderate public transport accessibility level (PTAL) of 4, on a scale of 1-6 where 6 represents the highest.

## Details of the proposal

10 The applicant proposes the demolition of the existing office and depot building on the site and the erection of 267 homes, made up of 224 flats and 43 houses.

11 The accommodation would comprise 51 one-bedroom, 146 two-bedroom and 27 three-bedroom flats; and 23 three-bedroom, 18 four-bedroom and 2 five-bedroom houses. The units would be contained in seven blocks ranging from two to seven storeys high, with improved site access, associated car parking and landscaping.

## Case history

12 No previous proposals of potential strategic importance have been submitted in respect of the site.

## Strategic planning issues and relevant policies and guidance

13 The relevant issues and corresponding policies are as follows:

- Housing *London Plan; PPS3; Housing SPG; Providing for Children and Young People's Play and Informal Recreation SPG, Housing Strategy; revised interim Housing SPG*
- Affordable housing *London Plan; PPS3; Housing SPG, Housing Strategy; revised interim Housing SPG*
- Density *London Plan; PPS3; Housing SPG; revised interim Housing SPG*
- Urban design *London Plan; PPS1*
- Access *London Plan; PPS1; Accessible London: achieving an inclusive environment SPG; Planning and Access for Disabled People: a good practice guide (ODPM)*
- Transport/parking *London Plan; the Mayor's Transport Strategy; PPG13;*
- Sustainable development *London Plan; PPS1, PPS1 supplement; PPS3; PPG13; PPS22; draft PPS Planning for a Low Carbon Future in a Changing Climate; the Mayor's Energy Strategy; Mayor's draft Climate Change Mitigation and Adaptation Strategies; Mayor's draft Water Strategy; Sustainable Design and Construction SPG*
- River Thames/flooding *London Plan; Mayor's draft Water Strategy; PPS25, RPG3B*

14 For the purposes of Section 38(6) of the Planning and Compulsory Purchase Act 2004, the development plan in force for the area is the 2006 Greenwich Unitary Development Plan and the London Plan (Consolidated with Alterations since 2004).

15 The following are also relevant material considerations:

- The Council's Core Strategy (Issues and Options) Document
- The consultation draft replacement London Plan, published in October 2009.
- The Thamesmead and Abbey Wood Supplementary Planning Document, December 2009

## **Land use and the principle of residential development**

16 The application site has no specific land use designation in the London Plan or consultation draft replacement London Plan. It does, however, fall within an Opportunity Area, as defined in policy 2A.5 of the London Plan and policy 2.13 of the consultation draft replacement London Plan. Opportunity Areas are London's major reservoir of brownfield land, identified for its capacity to accommodate substantial new jobs and homes, and linked to existing or potential improvements to public transport accessibility.

17 The application site lies within the Woolwich, Thamesmead & Charlton Riverside East Opportunity Area in the London Plan, and the Thamesmead and Abbey Wood Opportunity Area in the consultation draft replacement London Plan. Strategic policy aims to maximise the opportunities they present for the delivery of jobs and housing in London. An Opportunity Area Planning Framework is proposed to guide the strategic development of the area.

18 With respect to local policy, the western portion of the site is designated for housing (site h1) on the UDP proposals map, whilst the eastern (i.e. office) portion has no land use designation. Historically, the office site has benefited from the renewal of several temporary planning permissions dating back to 1976, the most recent of them being a ten-year renewal that expired in 1996 and has never been renewed since then. The use has, however, subsisted for more than ten years and would qualify for a Certificate of Lawful Use on that basis without the need for express planning permission.

19 Given its de facto use for office purposes, the site would normally be subject to UDP policy J5, which seeks to protect sites in existing employment use situated outside the designated employment areas, from changes of use to a non-employment use, unless specified criteria are met (i.e. the site is demonstrably unsuitable, physically or environmentally, for continued employment use; that there is no demand for an employment use following two years of unsuccessful marketing; or that only a mixed-use can be shown to be viable).

20 In this instance, however, the UDP schedule of site specific proposals explicitly envisages a residential development of the open scrubland in conjunction with the adjoining office site, if the latter became surplus to the operational requirements of the housing association that occupies it. The temporary buildings have now outlived their economic usefulness and Gallions Housing Association has relocated most of its office operations to Sidcup in Kent, retaining only a skeleton staff at the site until proposals for a redevelopment of the site are permitted.

21 The present status of the site is clarified further by the recent joint publication of the Thamesmead and Abbey Wood Supplementary Planning Document by Greenwich and Bexley Councils. The SPD forms part of the Greenwich Local Development Framework and is intended to supplement the policies and proposals of its UDP and the London Plan. The SPD reaffirms a residential development of proposal site h1 as a key consideration; but in the light of the proposed

Crossrail station at Abbey Wood town centre and its potential to support a higher density of uses and regenerate area, the SPD also commits to the joint preparation of a development framework to facilitate the comprehensive masterplanning of Abbey Wood and avoid a piecemeal development of the area. The framework will include an assessment of development capacity; an integrated public realm, with fully accessible pedestrian and public transport interchange; an appropriate mix and distribution of uses and activities within the area; a phased programme of delivery; an urban design strategy with indications of the scale and massing of proposed new buildings; and innovative design solutions to local flood risk. The Council proposes to resist premature applications in advance of the masterplan for the site.

22 It is evident from the foregoing that the principle of a residential development of the site is acceptable from a strategic planning and local policy perspective.

## Housing issues

23 London Plan policies 3A.1, 3A.2 and 3A.3 affirm the Mayor’s commitment to increase London’s housing supply through the monitoring of annual targets, which borough Councils are encouraged to exceed by identifying new sources of supply and maximizing the development potential of sites to an extent that is compatible with local context, public transport capacity and strategic design principles. Those objectives are reiterated in policies 3.3 and 3.4 the consultation draft replacement London Plan, which provides up to date housing targets for London (33,380 units per annum) and each of the boroughs, for the ten-year period between 2011/12 and 2020/21.

24 The borough target for Greenwich is 2,595 new homes per annum for the above period, the vast majority of which are expected from large and small sites identified in the 2009 Strategic Housing Land Availability Assessment and Housing Capacity Study (SHLAA/HCS). The Thamesmead & Abbey Wood Opportunity Area is expected to contribute a minimum of 3,000 new homes towards the borough target.

25 The application proposal is for 267 new homes on a 2.28-hectare site, giving a residential density just marginally below 400 habitable rooms per hectare (or 117 units/ha.) Measured by habitable rooms, this figure approaches the upper end of the range (200-450 hr/ha.) indicated in the London Plan density matrix for a site in an urban setting with a public transport accessibility level of four. It also sits comfortably within the indicative range (55-145 unit/ha.) for a residential scheme with an average 3.4 hr/unit and is, therefore, acceptable in strategic planning terms subject to design considerations set out in paragraphs 35 to 51.

dwelling type	hab.rooms per unit	number	total hab. rooms	mix (%)	GLA min. size (sq.m.)	proposed unit sizes
1 bed (2p) flat	2	51	102	11	50	46.8-52.4
2 bed (4p) flat	3	146	438	48	70	72.3
3 bed (5p) flat	5	15	75	8	86	90.4
3 bed (6p) flat	5	12	60	6.5	100	96.2-104.1
3 bed (5p) house	5	23	115	13	96	92.0
4 bed (7p) house	6	18	108	12	107	120.8
5 bed (8p) house	7	2	14	1.5	113	134.6
<b>Total</b>	-	<b>267</b>	<b>912</b>	<b>100</b>	-	-

**Table 1:** The proposed housing mix and unit sizes.

26 In terms of housing mix, the table above indicates that approximately 40% of the proposed habitable rooms would be in family units with three or more bedrooms, whilst 60% would be one

and two-bedroom non-family units. This is a fair mix of unit types that would fulfil the objectives policy 3A.5 of the London Plan, and policies 3.8 and 3.10 of the consultation draft replacement London Plan.

27 The table also indicates that whilst most of the units meet or exceed the essential minimum sizes proposed in the draft London plan and associated Draft Mayor’s housing design guide which is welcomed, the wide variety of unit types within the scheme mean that a minority of the one and three-bedroom units fall below the minimum expectation. The applicant should endeavour to raise these above the emerging size thresholds to ensure a satisfactory residential quality.

## Affordable housing

28 London Plan Policy 3A.10 requires borough councils to seek the maximum reasonable amount of affordable housing when negotiating on individual private residential and mix-use schemes. In doing so, each council should have regard to its own overall target for the amount of affordable housing provision. Policy 3A.9 states that such targets should be based on an assessment of regional and local housing need and a realistic assessment of supply, and should take account of the London Plan strategic target that 35% of housing should be social and 15% intermediate provision, and of the promotion of mixed and balanced communities. In addition, Policy 3A.10 encourages councils to have regard to the need to encourage rather than restrain residential development, and to the individual circumstances of the site. Targets should be applied flexibly, taking account of individual site costs, the availability of public subsidy and other scheme requirements.

29 Policy 3A.10 is supported by paragraph 3.52, which urges borough councils to take account of economic viability when estimating the appropriate amount of affordable provision. The ‘Three Dragons’ development control toolkit is recommended for this purpose. The results of a toolkit appraisal might need to be independently verified.

30 Greenwich Council is in the preliminary stages of preparing a Local Development Framework; its borough housing target (SH1) to complete 16,100 net additional dwellings between 1997 and 2016 has, therefore, been superseded by the London Plan target of 20,100 (2,010 units annually) for the period 2007/8 to 2016/17. The Council has, however, retained its UDP target (SH5) to ensure that at least 35% of the dwellings provided between 1997 and 2016 are affordable to those on low and lower incomes.

31 The applicant proposes 93 units of affordable housing, split on a 70:30 ratio of social rented to intermediate housing. The mix of affordable units would be as follows:

	<b>social rented</b>	<b>intermediate</b>	<b>total</b>
<b>flats</b>	-	-	
1-bed	6	4	10
2-bed	27	10	37
3-bed	2	1	3
<b>houses</b>	-	-	-
3-bed	10	13	23
4-bed	18	0	18
5 -bed	2	0	2
<b>total</b>	<b>65</b>	<b>28</b>	<b>93</b>

**Table 2:** Affordable housing by mix and tenure split.

32 It can be calculated from the table that the affordable housing would be split almost equally between family and non-family sized accommodation. Gallions Housing Association would be the registered social landlord responsible for managing the affordable housing component of the scheme.

33 Although the proportion of affordable housing meets the Council's 35% minimum requirement, insufficient evidence is available to demonstrate that the applicant's contribution is the maximum reasonable amount that can be provided without jeopardising the overall viability of the scheme. The applicant has cited, amongst other factors, the high cost of mitigating the risk of flood on a site within Zone 3 of the Environment Agency's flood risk map, the high cost/low return characteristics of developing in the local area, and the prevailing national financial and economic circumstances. On the other hand, however, there is no indication that a public subsidy would not be available from the Homes & Communities Agency; and the applicant 's ownership of the land means that there is no acquisition cost to incur in securing the site.

34 The applicant should submit a toolkit appraisal of financial viability to demonstrate compliance with strategic policy before the application is referred back to the Mayor.

### Children's play space

35 Policy 3D.13 of the London Plan sets out that "the Mayor will and the boroughs should ensure developments that include housing make provision for play and informal recreation, based on the expected child population generated by the scheme and an assessment of future needs." Using the methodology within the Mayor's supplementary planning guidance 'Providing for Children and Young People's Play and Informal Recreation' it is anticipated that there will be approximately 180 children within the development. The guidance sets a benchmark of 10 sq.m of useable child play space to be provided per child, with under-5 child play space provided on-site. As such the development should make provision for 1,800 sq.m. of play space.



Fig 2: Proposed distribution of open amenity/children's play space within the site \*

36 The submitted layout illustrates an extensive distribution of open amenity areas throughout the development. The provision consists of a tree-lined and hard-surfaced 'entrance square' to act as a focal point for residents and visitors to the development; a 'shared garden' with lawns and a designated children's play area at the centre of the scheme; a small 'public green' with hard and soft landscaped areas, including a mix of trees; a 'birch grove' comprising silver birch and hazel trees; a 'linear garden' along the entire eastern side of the site; and a 'wetland garden' centred on the existing ditch, over which new footbridges would be provided.

37 In addition, the layout provides for all family houses to have a minimum 50 sq.m. of private garden space to meet the local Council standard, and all flats to be provided with balconies. These potential play areas have not, however, been quantified in the accompanying plans to allow a proper assessment against the Mayor's SPG on the provision of children and young people's play and informal recreation. The private garden, balconies and designated play areas may well be suitable for toddlers and younger children, but might not meet the needs of teenage or older children.

38 The applicant is, therefore, advised to specify the size of all potential play areas, including balconies, suitable for children up to the age of nine; details of any equipment to be provided on site; and details of the nearest accessible parks/playgrounds that are within safe walking distance of the site and are suitable for children in the 10-16 age group.

## **Urban design and architectural quality**

39 Good design is central to all objectives of the London Plan and is specifically promoted by the policies contained within Chapter 4B which address both general design principles and specific design issues. London Plan Policy 4B.1 sets out a series of overarching design principles for development in London. Other design policies in this chapter and elsewhere in the London Plan include specific design requirements relating to maximising the potential of sites, the quality of new housing provision, tall and large-scale buildings, built heritage, views, and the Blue Ribbon Network. London Plan policies 4B.9 and 4B.10, which set out specific design requirements for tall and large-scale buildings, and those relating to strategic views are applicable to the proposal. The applicant should also have due regard to the revised London View Management Framework SPG.

40 As indicated in the site description, Abbeywood station and town centre is within a five-minute walking distance of the application site. The surrounding area is a mix of industrial and residential uses. The industrial space is located primarily on the western side of Harrow Manor Way, with residential development further to the west and east. The majority of the residential units to the east of the site are two and three-storey buildings, dating from the late 1950s to the 1980s. The residential development on the eastern side of Harrow Manor Way, which forms the Tavy Bridge Estate, is a more typical 1970s housing estate. These buildings are primarily between three and five storeys, with some taller 13-storey blocks further east.

### Wider context

41 The applicant has prepared a masterplan for this application site and the sites to the south and west of Harrow Manor Way. This approach is supported, however, there is limited information within the application demonstrating how this masterplan has influenced the design proposals for this site. This wider masterplan information should be provided to allow a more detailed understanding and context. This information will allow a more complete understanding of emerging built form and heights, arrangement of open spaces, and pedestrian and vehicle movement across the area.



## Block arrangement and built form

42 The application proposes seven residential blocks. Blocks one, two, three and five sit on the northern and western edges of the site and help to create a more traditional street, each with their own door access and car parking along the street edge, which is supported. This approach will create clearly defined public and private spaces that are well overlooked and used by residents. These four blocks are comprised of two and three-storey residential terraces that sit comfortably alongside the existing one and two-storey units off site.

43 The proposed street and block arrangement of blocks one, two and three result in the creation an informal open space at the north-western corner of the site. This space is well defined, with clear enclosure and good levels of overlooking. The provision of this space is supported but further information should be provided with regards the detailed design of the green space, front gardens, footpaths and car parking.

44 The taller blocks, blocks four to seven, are located to the east and south of these terraces. These four blocks range in height from six to seven storeys and are located further away from the more sensitive existing homes off-site. Given the lack of sensitive buildings within the immediate context of these new buildings, as well as the heights of existing buildings across Harrow Manor Way, the general height of these buildings does not raise strategic planning policy concerns.

45 These four blocks in the centre of the site are arranged as linear buildings with east-west facing apartments. The provision of east-west facing apartments is supported, and ensures that there are no north-facing single-aspect units. Open spaces are located between each of the four blocks, which provide public amenity space along with north-south public movement routes.

46 This approach raises some concern. Providing this number of public open spaces and public north-south routes would serve to dilute activity and result in a number of underused open spaces that could serve to detract from the area in the future.

47 The applicant has attempted to address this concern through the introduction of some landscaping features and different themes within each of the spaces. Whilst these landscaping measures are welcomed, they will not be sufficient to activate these areas in the long term.

48 It is suggested that to address this concern, the applicant should more clearly defined boundaries between public and private space. It may be more beneficial to privatise, or enclose the open space between blocks three and four. This approach would provide residents with dedicated private amenity space. The main central space, between blocks four and six could have larger private gardens associated with the ground floor flats. This approach would ensure that public activity and movement is focused in one area, the main shared garden space, thereby creating a clear focal point within the site and reducing the tendency to create underused areas with the potential for anti-social behavior.

## Architectural treatment

49 The elevation treatment of the residential terraces and the variation proposed is welcomed. These units will see the introduction of a quality housing form into this area.

50 There is a concern with the treatment of the linear residential buildings, which propose the location of car parking at ground level with residential units above. This approach results in large areas of blank facade at ground level that reduce overlooking and the potential for interaction with the streets and spaces that surround these buildings. This will reduce the level and quality of social activity around the edges of these building.



*Block 7: located along Harrow Manor Way \**

## **Inclusive design and access**

51 Policy 4B.5 of the London Plan requires all future development to meet the highest standards of accessibility and inclusion, and ensure that from the outset the design process has considered how everyone, including disabled and deaf people, older people, children and young people, would be able to use the places and spaces that are proposed. This, together with the Supplementary Planning Guidance 'Accessible London: achieving an inclusive environment', underpins the principles of inclusive design and aims to achieve an accessible and inclusive environment across London. These policies are respectively supported by policies 7.2 and 3.8 of the Mayor's consultation draft replacement London Plan.

52 The site is in close proximity to local services and public transport links, with north and southbound bus stops situated a short distance from the main pedestrian and vehicular site entrance on Harrow Manor Way. With safe and convenient crossing points, the adjacent public footpaths would allow mobility scooter users and less able residents to travel relatively short distances. Two additional pedestrian entrance points would be provided directly from the pavement to the communal entrances of the block of flats (Block 7) fronting Harrow Manor Way, through gates integrated into the proposed decorative boundary railing.

53 Within the site itself, traffic calming measures, including speed tables and pedestrian friendly paving, would be used to enhance pedestrian safety and the shared surface nature of the scheme. From there, both communal and private entrances would be clearly visible and approachable.

54 All the residential units have been designed to Parker Morris space standards, though some fall short of the Mayor's minimum requirement (see table 1 and paragraph 27 above). They also designed to meet the Lifetime Homes requirements and the Housing Quality Indicators (HQIs) version 4 (updated in April 2008). The latter are used to assess the quality of housing schemes funded through the National Affordable Housing Programme.

55 In addition, 10% of the dwellings would be dedicated wheelchair accessible units, including two four-bedroom terraced family houses in Block 3.

56 For internal movement, all approach routes to the building would have level or ramped access, with the associated ground floor communal facilities (refuse, car parking, amenity, etc.) designed with level thresholds. For wheelchair users, level threshold access would be provided to all dwellings, with twin lift access provided to all upper floor units. The electronic security access controls to communal entrance doors would also be fixed at accessible levels.

57 Dedicated, secure and enclosed wheelchair accessible parking for the flats would be provided close to the lift cores in the covered car park areas, with direct electronic entry control to the communal areas. Where units are above ground floor, the relevant stair core would be served by two lifts.

## **Transport for London's comments**

58 TfL provided detailed comments on this application to Greenwich Council on Tuesday 22 June 2010, a summary of which is provided below:

59 Abbey Wood is the proposed terminus of the Crossrail south-eastern branch line. Due to open in 2017, it would provide frequent links towards central London. Given that the area, including this application site, would benefit directly from Crossrail, TfL would support a contribution towards its funding, in line with Greenwich Council's adopted Supplementary Planning Guidance on Planning Obligations.

60 Although reference has been made in the transport assessment to the Greenwich Waterfront Transit, the applicant needs to be aware that the scheme is not in TfL's current business plan for the period up to 2017. TfL nonetheless encourages the Council to safeguard a strip of land along the eastern boundary of the site, to be made available for any future implementation of public transport improvements, such as bus priority measures, along the Harrow Manor Way corridor. TfL encourages this to be integrated within the design and site layout, and secured by way of condition.

61 The trip generation exercise undertaken for the development is currently not in line with TfL's transport assessment best practice guidance. Further information is requested, particularly in relation to the modal splits likely to be generated, in order to accurately establish the impact of the proposals on the transport network, including the local highway. TfL requires further discussion with the applicant on this matter.

62 Car parking provision is at the upper end of London Plan standards, with a provision of 0.85 spaces per residential unit. Whilst this is in line with the maximum car parking standards set out in the London Plan (Annex 4) policy 3C.23 on '*Parking Strategy*' and the Mayor's consultation draft replacement London Plan policy 6.9 on '*Parking*', the applicant should consider the scope for reducing this further, as that level of parking cannot be seen to be constraining car use from a site with a good public transport accessibility level. TfL also requires further information on the management of spaces and how they would be allocated to residents to ensure full compliance with London Plan policy. In line with the consultation draft replacement London Plan policy 6.13, '*Parking*', electric vehicle charging points should be installed for at least 20% of all parking spaces, with a further 20% of spaces having passive provision.

63 To establish the potential impact on the capacity of the train and bus network, TfL requires further information from the applicant through the submission of a comprehensive modal split analysis. This would enable the planning of an appropriate bus network for the area in line

with London Plan policy 3C.20, '*Improving conditions for buses*' and draft replacement London Plan policy 6.7, '*Buses, bus transits and trams*'. Depending on the results of this study, TfL may seek mitigation measures towards increasing the frequency and capacity of the network. In order to encourage the use of buses to and from the site, and to promote inclusive accessibility to all users of the proposed development, TfL considers that nearby bus stops may need to be upgraded. Further details on the condition of bus stops will be provided to the applicant to ensure consistency with London Plan Policy 3C.20 '*Improving conditions for buses*.'

64 Due to the relatively high level of parking, and in recognition of the good accessibility of the site, proactive measures should be adopted to increase the use of public transport to and from the site. TfL recommends that the applicant should undertake a pedestrian environment survey to assess the functionality of the area for all users. Where any deficiencies exist, improvements should be secured at the developer's expense through the s106 agreement, to ensure compliance with London Plan policy 3C.21, '*Improving conditions for walking*' and draft replacement London Plan policy 6.10, '*Walking*'.

65 TfL notes that the site is well connected to a number of cycle routes in the local area. To ensure compliance with TfL's Cycle Parking Standards, as detailed in London Plan policy 3C.22, '*Improving conditions for cycling*' and the consultation draft replacement London Plan, policy 6.9 '*Cycling*', the level of onsite cycle parking should be increased from 267 to 347 spaces, in order to accommodate the demand from the larger units. All cycle parking spaces should be located in a secure, covered and monitored location and their use promoted through the proposed travel plan.

66 TfL welcomes the submission of a travel plan for the site, although it does not meet the current requirements contained in TfL's 'residential travel plan' guidance. To ensure a high quality plan that promotes the use of sustainable transport, in line with London Plan policy 3C.3, '*Sustainable transport in London*' and the consultation draft replacement London Plan policy 6.1, '*Strategic Approach*', further information should be provided on targets, funding and management of the plan.

67 TfL requires the submission of a construction and logistics plan secured by condition, with Greenwich Council to undertake preventative measures, so as not to impede peak hour flows on the surrounding roads. TfL also requires that the development be supported by a delivery and servicing plan, in accordance with London Plan policy 3C.25, '*Freight Strategy*' and the consultation draft replacement London Plan, policy 6.14, '*Freight*', which should identify efficiency and sustainability measures to be undertaken once a development is operational.

68 Subject to the above matters being addressed through the provision of further information on trip generation, an increase in cycle parking, and the investigation of a decrease in car parking provision; alongside the submission of a construction and logistics plan, a delivery and servicing plan, and a travel plan; TfL considers that the proposed development would accord with the transport policies of the London Plan.

## **Climate change mitigation**

69 The London Plan climate change policies as set out in chapter 4A collectively require developments to make the fullest contribution to tackling climate change by minimising carbon dioxide emissions, adopting sustainable design and construction measures, prioritizing decentralised energy supply, and incorporating renewable energy technologies with a target of 20% carbon reductions from on-site renewable energy. The policies set out ways in which developers must address mitigation of and adaptation to the effects of climate change.

## Energy

70 Policies 4A.1 to 4A.8 of the London Plan focus on how to mitigate climate change, and the carbon dioxide reduction targets that are necessary across London to achieve it.

### Be Lean

#### Baseline emissions (policy 4A.4)

71 The carbon dioxide emissions of the proposed development have been estimated using SAP building regulations compliance modelling software to be 664 tonnes of carbon dioxide per annum. However, it is not clear from the information provided that unregulated emissions are included. The applicant should confirm that unregulated emissions are included in the baseline figures or update the baseline figures accordingly.

#### Energy efficiency standards (policy 4A.3)

72 The applicant has outlined a series of planned passive measures including air permeability and heat loss parameters that exceed the backstop values in building regulations. However, no plans to install energy efficient services, e.g. lighting, are proposed with the statement made that it is outside the scope of the energy strategy. The SAP modelling provided indicates that the savings would only be between 1% and 3% beyond building regulations. The applicant should investigate and commit to measures, including energy efficient services that enable the 2006 building regulations to be significantly exceeded. Adopting best practice, it is possible for residential developments such as this to exceed Building Regulations 2006 by 20% through energy efficiency alone and the applicant should aim towards this. Where possible, the applicant should also relate the development to 2010 building regulations by providing an indication of the savings over a 2010 Part L compliant building at each stage of the energy hierarchy.

### Be Clean

#### District heating (policies 4A.5 and 4A.6)

73 The energy strategy proposes a heat network serving the apartments on the development, with heat provided from an energy centre in the north of the development. The applicant should determine whether there are external district heating networks in the vicinity of the development and, where there are, investigate the possibility for connecting the site's heat network with the external network.

74 The applicant is not proposing to connect the houses to the site's heat network. These will be heated using individual gas boilers. Given the higher heat losses associated with serving individual houses, it is accepted that they will not be served by the communal system.

75 The applicant should provide further details in relation to the planned energy centre. Specifically, what the floor area of the energy centre will be and when the energy centre will be constructed in relation to the phasing of the development.

#### Combined heat and power (policy 4A.6)

76 The applicant has investigated the case for combined heat and power (CHP) but rejected its application to the development. While the potential carbon savings from CHP appear to have been underestimated, it is accepted that due to the characteristics of this development, including its scale, that CHP is not suitable in this case.

## Cooling (policy 4A.6)

77 No information is provided on how the need for active cooling will be avoided in the development. Information needs to be provided on how the risk of overheating will be minimised through passive design measures.

## Be Green

### Renewable energy technologies (policy 4A.7)

78 The applicant is proposing the installation of biomass boilers, supplemented by top-up gas boilers, within the energy centre providing an additional 22% reduction in carbon emissions. There is some uncertainty over the sizing of the boilers in relation to the heat demand. The applicant should, therefore, provide monthly heat load profiles showing the proportion of heat provided by biomass boilers in relation to the top-up gas boilers.

79 Additionally, where biomass boilers are proposed, it needs to be demonstrated that they have no adverse effects on local air quality when compared with conventional gas fired boilers.

80 The biomass boiler must be certified as an exempt appliance in accordance with the Clear Air Act 1993. Efforts should be made to ensure the biomass boiler be one of the lowest emitting models available on the Government's Exempt Appliance list at the time of installation. The following information should also be provided:

- The make, model and thermal capacity of the biomass boiler and details of the additional abatement technology that has been investigated for fitment to reduce air pollution emissions. What reductions in emissions will this produce?
- The type, height and location of the chimney
- Information on the fuel, fuel feed system, the fuel supply chain, fuel delivery and storage and the arrangements that have been investigated to secure fuel.
- A breakdown of emissions factors for NO<sub>x</sub>, particulates and any other harmful emissions from the biomass boiler.

81 An assessment of the impact of the emissions to ground level concentrations and any additional impact to surrounding buildings/structures should also be provided. The results of dispersion modelling should be presented on a map.

82 In relation to the houses, the energy strategy proposes the installation of 172 sq.m. of solar thermal panels and 430 sq.m. of photovoltaic panels, producing a 6% reduction in site emissions across the two phases.

83 The current energy strategy estimates that the carbon emissions of the development are 502 tonnes of carbon dioxide per year after the cumulative effect of energy efficiency measures and renewable energy has been taken into account. This broadly equates to a reduction of 24% compared to a 2006 building regulations compliant building (approximately 1% less than required for 2010 building regulations compliance).

### Overall acceptability:

84 The applicant has broadly followed the energy hierarchy in London Plan policy 4A.1. Sufficient information has been provided to understand the proposals, which are likely to be acceptable in broad terms, subject to further information and revisions.

## Climate change adaptation

85 Developments are required to be adaptable to the climate they will face over their lifetime and to address the five principles set out in policy 4A.9 of the London Plan. These are: to minimise overheating and contribution to heat island effects; minimise solar gain in summer; contribute to flood risk reductions, including the application of sustainable drainage principles; minimise water use; and protect and enhance green infrastructure. Specific policies cover overheating, living roofs and walls, and water conservation.

86 Chapter 5 of the consultation draft replacement London Plan also considers climate change adaptation, specifically in policies 5.9 to 5.15.

### Overheating and heat island effects

87 The applicant proposes adopt a series of passive design measures to the building envelopes to minimise solar gain in summer and maximise it in winter. The measures include an increase in fabric insulation, improving air tightness within the buildings, and reducing thermal bridging in order to attain level 4 of the Code for Sustainable Homes. This approach is consistent with policy 4A.10 of the London Plan, though the submitted details are sketchy and may need to be secured by Greenwich Council imposing an appropriate planning condition.

### Flood risk reduction

88 London Plan policy 4A.12 requires borough councils reviewing their DPDs to carry out strategic flood assessments to identify locations suitable for development and those required for flood risk management, as indicated in the sequential test described in PPS25 (*'Development and Flood Risk'*). In areas at risk from flooding, the assessment of risk should be carried out in accordance with the advice in PPS 25.

89 The site is located within defended flood Zone 3a of the River Thames on the Environment Agency Flood Map. This indicates a high (i.e. 1 in 200 or greater) annual probability of flooding in the event of a breach of the River Thames defences during the 1 in 200 tidal flood event. The national policy for Zone 3 requires proposals for development to be accompanied by a Flood Risk Assessment, and that residential dwellings should only be permitted in the zone if the Exception Test has been passed (i.e. the development provides wider sustainability benefits to the community that outweigh the flood risk; that the development is on developable previously developed land, or if not on previously developed land, that there are no reasonably developable alternative sites on previously developed land; and a flood risk assessment has demonstrated that the development will be safe and will not increase flood risk elsewhere, and where possible will reduce flood risk overall).

90 The site also has the potential to worsen the risk of surface water flooding to the area, if surface water is not appropriately managed on site.

91 To manage the flood risks, the applicant has produced a Flood Risk Assessment to demonstrate that the residential development would be designed to ensure that all habitable accommodation would be set at or above 2.7metres above ordnance datum (AOD), with the floor levels of all bedrooms set no lower than 3.66m AOD. Only semi-basement car parking, under the multi-storey buildings, is proposed at a lower level on the site.

92 The proposed ground floor level is set just above the maximum breach flood water level of 2.67m AOD<sup>1</sup> indicated by a breach modelling exercise undertaken as part of the applicant's flood

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<sup>1</sup> The East London Strategic Flood Risk Assessment (2005) pre-dates the current version of PPS25 and makes no allowance for climate change.

risk assessment. The applicant's breach modelling has been approved by the Environment Agency, and the measures proposed are compliant with an agreement with Greenwich Council to resist any proposal for residential development that is set below the 1 in 200 year (2107) breach flood water level.

93 Portions of the site along the western boundary and the western part of the northern boundary would be raised to at least 2.5m AOD to enable the ground floor levels of the houses to be elevated above 2.67m AOD (the residual risk tidal breach requirement). Some roads and external public areas on site will be raised to improve level access and usability of the external areas.

94 Finally, to ensure a robust approach to flood risk assessment, the applicant has considered the option of occupier evacuation for the worst-case scenarios. Allowing for climate change or greater tidal flood, the site was shown to be at risk of flooding in the extremely unlikely event of a breach of the tidal defences during the 1 in 200 year event. The modeling of a tidal breach flood indicates that occupants would have approximately 16 hours' warning until breach floodwater levels reach the site, from the start of the breach event; this should be sufficient to enact appropriate warning and evacuation of the site. Evacuation should be to the south of the site, to the higher ground south of Abbeywood railway station.

95 In the event that evacuation from the site is not possible, all residential buildings are designed to ensure that all habitable accommodation is located above the final breach level. Should final breach water levels exceed the calculated on-site peak water level, all houses and residential blocks have upper floors to allow internal escape to a higher level.

#### Sustainable urban drainage

96 The supporting text (paragraph 4.37) to London Plan policy 4A.13 '*Flood risk management*' underscores the reduction in flood risk that can be achieved through appropriate location, design and construction of development and the sustainable management of surface water run-off; whilst policy 4A.14 '*Sustainable drainage*' sets out a drainage hierarchy for the management of surface water as close to its source as possible.

97 The applicant's investigations indicate that whilst a Thames Water surface water sewer runs along the western boundary of the site, the undeveloped western portion of the site (amounting to 0.88 ha.) has no formal drainage. In the event of rainfall, surface water is likely to accumulate as a pond before running off to adjacent properties.

98 The developed eastern side (totalling 1.40 ha.) is predominantly hard surfaced and formally drained by an on-site surface water system, which discharges as a combined flow into a Thames Water foul sewer along the boundary with Harrow Manor Way.

99 Drainage details of the on-site ditch remain limited in the absence of intrusive site investigation works. There are, however, no apparent indications of any formal surface water outfalls into the ditch from the site, or of outflows from the existing developed areas to the south into the ditch.

100 A drainage strategy has been prepared for the site that envisages:

- Drainage of foul water from the entire site via a new manhole connection to the combined foul sewer on Harrow Manor Way.
- Drainage of the western portion of the site, including all the houses and the roof area of Block 5, by creating a new connection to the Thames Water surface water sewer along the western boundary of the site.



- Drainage of the eastern portion of the site, including all remaining blocks and proposed access roads, by maintaining and reusing the existing connections to the combined foul sewer on Harrow Manor Way.
- Peak flow rates to each of the receiving sewers would be limited to the mean pre-development run-off rate, and adequate attenuation storage in the form of storage tanks and oversized pipes are proposed.
- The scheme would be designed to include a significant proportion of permeable paving and porous surfaces, and the final volumes of surface water storage/attenuation capacity would be revised accordingly.

101 A comparison between these measures and the drainage hierarchy set out in London Plan policy 4A.14 demonstrates compliance with strategic requirements. The applicant also considers that the proposed drainage strategy fulfils all the mandatory elements of the Code for Sustainable Homes, Category 4: Surface Water Runoff.

### **Local planning authority's position**

102 The application is scheduled to be reported to Greenwich Council's Planning Board on 29 July 2010, with an officer recommendation for approval, subject to any necessary revisions, additional information, conditions and a legal agreement.

### **Legal considerations**

103 Under the arrangements set out in Article 4 of the Town and Country Planning (Mayor of London) Order 2008 the Mayor is required to provide the local planning authority with a statement setting out whether he considers that the application complies with the London Plan, and his reasons for taking that view. Unless notified otherwise by the Mayor, the Council must consult the Mayor again under Article 5 of the Order if it subsequently resolves to make a draft decision on the application, in order that the Mayor may decide whether to allow the draft decision to proceed unchanged, or direct the Council under Article 6 of the Order to refuse the application, or issue a direction under Article 7 of the Order that he is to act as the local planning authority for the purpose of determining the application and any connected application. There is no obligation at this present stage for the Mayor to indicate his intentions regarding a possible direction, and no such decision should be inferred from the Mayor's statement and comments.

### **Financial considerations**

104 There are no financial considerations at this stage.

### **Conclusion**

105 London Plan policies on land use and the principle of a residential development, housing, affordable housing, residential density, urban design, inclusive access, transport, and climate change adaptation and mitigation (including energy and flood risk issues) are relevant to this application. The application complies with some of these policies but not with others, for the following reasons:

- **Affordable housing:** The applicant has not submitted a financial viability appraisal to allow verification that the affordable housing contribution is the maximum reasonable amount that can be provided, as suggested by policy 3A.10 and paragraph 3.52 of the London Plan.

- **Children’s play space:** Notwithstanding the single area of children’s play space shown on the proposed site layout, there is a lack of detail on the amount and distribution of play space for different age groups within the development, as required by London Plan policy 3D.13 and the Mayor’s SPG ‘Providing for Children and Young People’s Play and Informal Recreation.’
- **Urban Design:** Some aspects of the design and layout of the scheme, particularly the lack of function and ownership of communal amenity space between the blocks; the expanse of blank wall on the ground floor car park elevation; require further attention to meet the design objectives of the London Plan.
- **Transport:** TfL requires additional information on trip generation; an increase in cycle parking; investigations into a decrease in car parking provision; submission of a construction and logistics plan; submission of a delivery and servicing plan; and the submission of a travel plan. It would also support Greenwich Council in seeking a contribution towards the funding of Crossrail, in line the Council’s Supplementary Planning Guidance on Planning Obligations.
- **Energy:** The additional information specified in paragraphs 72 to 85 is required to ensure full compliance with the energy policies of the London Plan.

106 Whilst the application is broadly acceptable in strategic planning terms, on balance, it does not comply with the London Plan.

107 The following changes might, however, remedy the above-mentioned deficiencies, and could possibly lead to the application becoming compliant with the London Plan:

- **Affordable housing:** The submission of a financial viability appraisal to demonstrate that the affordable housing offer is the maximum reasonable contribution that the development can sustain.
- **Children’s play space:** The submission a quantified breakdown, distribution and levels of equipment for all play space to be provided within the development; to allow full assessment of play space against the London Plan and Mayor’s SPG on children’s play space.
- **Urban design:** Revisions to address the points raised in paragraphs 41 to 50 of this report (as summarised in paragraph 106 above).
- **Transport:** A detailed response to the TfL’s requirements, as set out in paragraphs 60 to 69 of this report and summarised above.
- **Energy:** A full, written response to the issues raised in the energy section (paragraphs 72 to 85) of this report.

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for further information, contact Planning Decisions Unit:  
**Colin Wilson, Senior Manager - Planning Decisions**  
 020 7983 4783 email colin.wilson@london.gov.uk  
**Justin Carr, Strategic Planning Manager (Development Decisions)**  
 020 7983 4895 email justin.carr@london.gov.uk  
**David Blankson-Hemans, Senior Strategic Planner (Case Officer)**  
 020 7983 4268 email david.blankson-hemans@london.gov.uk

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