

**REPORT FOR CONSIDERATION AT PLANNING COMMITTEE**

**Reference No:** HGY/2010/0055

**Ward:** Alexandra

**Date received:** 07/01/2010

**Last amended date:** N / A

**Drawing number of plans:** 18631A-1 - 14 incl.; 0819 A-G000A; 0819 A-F-G200-P-00-01B; 0819 A-KS1-G200-P-00-01B; 0819 A-KS2-G200-P-00-01B; 0819 A-KS2-G200-P-01-01A; 0819 A-F-G200-P-Rf-01A; 0819 A-KS1-G200-P-Rf-01A; 0819 A-KS2-G200-P-Rf-01A; 0819 A-F-G200-E-01A; 0819 A-KS1-G200-E-01B; 0819 A-KS2-G200-E-01B; 0819 A-F-G200-S01A; 0819 A-KS1-G200-S01A; 0819 A-KS1-G200-S01A; 0819 B-500; 0819-LA-G700 - 705 incl., 710, 711, 713, 715 - 720 incl., 740, 750 all rev 3

**Address:** Rhodes Avenue Primary School, Rhodes Avenue N22 7UT

**Proposal:** Refurbishment, extensions and new build to create expansion from two form to three form entry, with associated landscaping.

**Existing Use:** D1 Education

**Proposed Use:** D1 Education

**Applicant:** Ms Claire Barnes Haringey Council

**Ownership:** Haringey Council

**PLANNING DESIGNATIONS**

Listed Buildings

Private Roads

Road Network: Borough Road

**Officer Contact:** Matthew Gunning

**RECOMMENDATION**

GRANT PERMISSION subject to conditions

**SITE AND SURROUNDINGS**

Rhodes Avenue Primary School covers approximately 1.5ha (c.3.7 acres) and is located in the north west of the borough, approximately 1.2 km away from the centre of Muswell Hill. The school consists of an existing 1930s reverse C-shaped building surrounded by later single storey buildings, hard and soft landscaping and grassed areas. The original 1930s school building was designed around a quadrangle, with the classrooms being positioned to have a south-eastern aspect. The school forms part

of a larger schools complex with Alexandra Park School located to the north. Rhodes Avenue forms the western site boundary and Albert Road Recreation Ground the eastern boundary.

Albert Road Recreation Ground and Muswell Hill Golf Course, which is located to the west of the site, falls within Metropolitan Open Land (MOL) and also an area of Local Ecological Value. To the south of the site is an area of cops land known as the Spinney which is also of local ecological value and which is owned by the Council but jointly managed by the school.

The school site was formerly the site of a large house that stood in fairly extensive formal gardens and parkland: Tottenham Wood House. The house was demolished in 1930s. The surviving portico of the house c.1800 (a listed structure) is located in a landscaped area in the southern corner of the school grounds. This area of the school also includes a large cedar tree of significance.

The surrounding area is residential in character consisting largely of properties built during the early 20th century. There is a level difference of approximately 3m down the site from Rhodes Avenue with a cross fall north to south. The school is accessed via a shared vehicular access which runs along the side of No 4 Rhodes Avenue and which also provides access to Alexandra Park School. There is also a pedestrian access for pupils and parents along the frontage of the site on Rhodes Avenue.

The school which currently has an Ofsted excellence rating provides places for 472 pupils with a catchments area of under 1 mile. The school has many after school clubs and extra curricular activities

The school is located approximately 850m from Bounds Green underground station and 1km from Alexandra Palace Rail Station.

## **PLANNING HISTORY**

OLD/1988/1573 - Extension of Planning Permission to enable retention of single mobile classroom for a further period of 5 years – Approved 26/01/1988

HGY/1992/0790 - Retention of portacabin on eastern side of site for use as a temporary classroom – Approved 29/09/1992

HGY/2004/2263 - Provision of temporary portacabin building to provide playcentre facilities – Approved 09/12/2004

HGY/2004/2377 - Provision of demountable playcentre – Approved 11/01/2005

HGY/2008/0755 - Replacement of existing crittal windows with PVCU double glazed windows and replacement of existing roof coverings with new roof coverings – Approved 27/05/2008

HGY/2009/2155 - Installation of temporary metal storage container (for maximum of 3 years) in school grounds. – Approved 09/02/2010

## DETAILS OF PROPOSAL

The proposal is for a combination of refurbishment and new build. A new foundation stage building, which will replace the existing Nursery building, will be located to the front of the site. In the very northern corner of the site next to the Alexandra Park School a large extension (combination of single and two-storey) will be erected following the demolition of existing single storey buildings. This new accommodation will accommodate Key Stage 2. The proposal will also involve the demolition of a wing to the 1930s reverse C-shaped building and the erection of extensions and refurbishment of the remaining parts of this building. A central core that links Key Stage 1 and 2 teaching accommodation will also be created.

The new overall building floor area will be 3,800sqm, gross internal floor area (GIFA) excluding the existing Year 6 building at 200sq metres which is not part of the proposed expansion and the existing Play Centre: both buildings which are located to the side of the existing 1930s building. Of the new floor area 600sq metres will be at first floor level, meaning the impact on the ground is reduced creating a footprint of 3,400sq metres including the Year 6 building. The GIFA of the existing school is 3030 sq.m.

A new pedestrian boulevard will be created providing access from Rhodes Avenue down to a defined entrance to the school and the key stage clusters. The site access road from Rhodes Avenue will also be retained for vehicular access while an additional access to the rear will be provided (subject to agreement) to enable access to the recreation grounds for PE use. New trees and landscaping are proposed to improve existing habitat area and encourage biodiversity. New fencing along Rhodes Avenue to the back edge of the pavement as well as gated access control and signage in the form of a vertical illuminated sign will be provided.

The proposed new accommodation and refurbishment are required to improve the accommodation on site and to expand the school from a two form to three form entry. An objective of the project is also to create an inclusive environment, demonstrated by the arrangement of SEN provision integrated into the school and the re levelling of existing stepped external area to create level access. The pupil numbers will increase from 472 to 682, while staff numbers will increase from 66 to 106 (foundation stage to year 6). The expanded/ refurbished school site will provide 9 car parking spaces.

## CONSULTATION

Ward Councillors (Alexandra, Bounds Green & Muswell Hill)

LBH - Building Control

LBH Arboricultural Officer

LBH – Cleansing

LBH - Transportation Group

LBH - Education - Children & Young Peoples Service

Crime Prevention Officer

Environment Agency

London Fire & Emergency Planning Authority

Muswell Hill & Fortis Green Residents Assoc Pat Bloomfield 14 Methuen Park  
Bounds Green & District Residents Association  
Alexandra Residents Association  
Alexandra Park Secondary School  
Muswell Hill Golf Club Rhodes Avenue N22  
Our Lady Of Muswell Lawn Tennis Club Rhodes Avenue N22

1-6 (c) Caversham Lodge, Grove Avenue  
155 – 265 (o), 250 – 262 (e) Albert Road N22  
85 -159 (o), 146 – 198 (e) Alexandra Park Road  
34 -80 (e) Bidwell Gardens N11  
121-147 (e) Durnsford Road N11  
25- 29 (o) Elgin Road N10  
2- 66 (e) Grasmere Road N10  
1-63 (o), 2-86 (e) Grosvenor Road N10  
70 – 84 (e), 71 – 93 (o) Grove Avenue N10  
1-6 (c) Kendalmer Close N10  
1-52 (c) Rhodes Avenue N2  
24-72 (e) 85 -109 (o) The Avenue N10  
1 – 49 (o), 2 – 42 (e) Thirlmere Road N10  
51- 55 (o), 88 -104 (e) Vallance Road N10  
201 -263 (o), 190 – 240 (e) Victoria Road N22  
1, 2 Yewtree Close

A total of 523 residents were consulted.

## RESPONSES

Environmental Agency - The application lies within Flood Zone 1 defined by Planning Policy Statement 25 as having a low probability of flooding. However the proposed scale of development may present risks of flooding on-site and/or off-site if surface water run-off is not effectively managed. Paragraph E9 of PPS25 requires applicants for planning permission to submit a FRA when development on this scale is proposed in such locations.

In the absence of a FRA, the flood risks resulting from the proposed development are unknown. The absence of a FRA is therefore sufficient reason in itself for a refusal of planning permission. This reflects the precautionary approach to development in flood risk areas set out in paragraphs 10 and E9 of PPS25 We ask to be re-consulted with the results of the FRA. Our objection will be maintained until an adequate FRA has been submitted.

Transportation - The site has a PTAL level of 2, which indicates a low level of Public Transport Accessibility to transport services. The site has not been identified within the Council's SPG as that renowned to have car parking pressure.

The proposed development is located adjacent to Rhodes Avenue and within a short walking distance of Alexandra Park Road and Albert Road which provides frequent bus services (some 67 two-way, bus trips per hour) for connections to East Finchley, Bounds Green underground stations and Bowes Park and Alexandra Palace Railway Stations.

We have taken the site's location into consideration and whilst the school is in a Ptal area of 2 with low accessibility, the school's location and catchment area and the availability of the adjacent bus routes and their connection to Bounds Green underground stations and Bowes Park and Alexandra Palace Railway Stations, the transportation and highways section are of the opinion that the school is more accessible than the Ptal calculation currently indicates.

*Pedestrian, Vehicle and Servicing Access.*

No formal objections to the retention of the existing access. Vehicles would be able enter and exit the site in forward gear which would be acceptable.

Transportation and highways would have no objections to the proposed pedestrian access to Rhodes School as it will be separated from the vehicle access and which ensure that pedestrian / vehicle conflict will be minimised which would be acceptable.

*Refuse / Servicing*

No formal objection to the proposed servicing arrangements; these have been designed within "Breeam" Guidance and would be acceptable in principle.

*Emergency Vehicles*

No formal objections to the retention of the existing access to the site large car; vehicles would be able enter and exit the site in forward gear which would be acceptable.

*Pedestrian Network*

Currently pedestrian access to the site is adequate, however given the proposed increase of 210 pupils, the existing levels of pedestrian access and road safety in Rhodes Avenue and the adjacent area will need to be improved to accommodate the increase in pupil / staff numbers.

This would include measures to improve the existing local safety infrastructure including possible upgrading of the existing crossing facilities including the possible introduction of speed calming measures including raised crossing facilities, and the possible introduction of 20mph speed limits in and around the Rhodes School Area.

Transportation and highways have identified the following information from the most recent travel plans submitted:

- The School catchment area is small 2.67 Sq miles and is over subscribed, as a result of this, children who live closest to the school are usually chosen.
- The majority of the pupils, 84% walk to school, 12.6% use a car, 0.8% use public transport Bus, Train or Underground. The existing transport links currently served the demand for travel adequately.

- The catchment area measured in a straight-line from the home address point to the schools using a GIS mapping system to provide distance to and from the school.
- The school have stated in their 2008/9 Travel Plan Rewrite that traffic moves at excessive speeds through Albert Road.
- In their Action Plan for this year there is an action to review 'Full Traffic Impact measures with Transport officers from Haringey but this action is set for May.

From the above information it is clear that the majority of pupils attending the school will be attending on foot which falls within Haringey Council aims of promoting sustainable forms of transport including walking.

#### *Parking Provision*

The site is classified as D1 use and as such the parking requirement for the scheme is assessed on an individual basis and there is no formal parking standard for schools. The Transport Assessment indicates that there is a demand for 20 car parking spaces, but provides a total of 11 spaces including 2 disabled spaces within the curtilage of the site.

There would be an overspill of some 12 spaces onto Rhodes Avenue, whilst not ideal, there is adequate on street parking available on Rhodes Avenue and the surrounding roads including Clifton Road, Victoria Road and Alexandra Park Road to absorb the additional on street parking demand created as a result of the expansion.

The peak hour of occupancy was found to be between 15:30 and 16:30pm when there were only seven parking spaces available in Rhodes Avenue; however there is some 15-20 on street car parking spaces available in Clifton Road, Victoria Road and Alexandra Park Road

And as such taken the level of on street parking that will be available, Transportation and highways raise no objection.

#### *Cycle Parking*

Cycle parking will be provided at 1 per 25 staff / students which equates to a total of 32 stands. The TA indicates the provision of only 30 stands which is a shortfall of two stands; I would like to see the provision of the required 32 stands.

#### *Travel Plan*

It has been agreed that a condition would be applied for the submission of a draft Travel Plan for comments / approval prior to the commencement of the development / expansion site. The submission of the draft travel plan would allow for scope to provide changes to the travel plan to cater for the specific needs of the Rhodes Avenue School.

The applicant has submitted a Robust travel plan framework which sets out the benefits, Objectives, Targets, Action Plans, Travel Plan Measures which will meet the aims of Haringey Council's objectives of increasing the promotion and reliance on sustainable travel in and around Rhodes Avenue School and the surrounding catchment area.

Transportation and highways would not object to this element of the application.

#### *Development Impact Analysis*

No objections in principle to both the existing and proposed trip Generation, Distribution and Assignment data included in the TA to provide the development impact Analysis. No objections in principle to both the existing and proposed modal share and trip data included in the TA and as such would be acceptable.

The expansion would result in the likely increase of 45 vehicles during the Am Peak (08:00am to 09:00am) which would be in an increase of less than 1 vehicle per minute (0.75 vehicles per minute).

There would be an increase of 36 vehicles during the Pm Peak (15:00pm to 16:00pm) which would be an increase of less than 1 vehicle per minute (0.60 vehicles per minute). This is not a significant increase in car trips to and from the site and would not have a detrimental effect on the surrounding highway network. This would be acceptable in principle.

#### *Junction Analysis*

The results of the threshold impact analysis indicate that the junction of Rhodes Avenue and Albert Road Priority junction would have an impact / increase in development trips of 4.4 % during the Am Peak and 3.9% during the Pm Peak

These figures do not exceed the IHT guidance of 5% at which junctions are recommended for further detailed investigation. This would be acceptable in principle.

#### *Construction Phasing*

The applicant has submitted a construction phasing plan which outlines the proposed method of the development construction this includes the proposed phasing of the works, and the proposed Construction Management plan.

The applicant will be required to submit a formal construction traffic management plan prior to the commencement of work on site. this to ascertain the level of disruption to the highway network in and around the Rhodes School site and to establish what mitigation will be required to lessen the impact of the construction traffic on both the site highway network during both the demolition and Construction phases of the works.

Scheme Mitigation. Proposed Safety Measures – Rhodes Avenue / Albert Road

Transportation has identified the following measure to help mitigate the impact development of the proposed expansion.

Including the provision of a raised crossing facility, at the junction Albert Road / Rhodes Avenue to help aid with the increased pedestrian traffic (student attending school) and provide a safe crossing facility

The possible introduction of 20mph speed limit in Rhodes Avenue / Albert Road to help reduce vehicular speed in the locale of the development site.

The implementation of carriage way markings, signage to help provide a safer environment for the both the existing and the increased numbers of student who will be attending the school. Further investigation is required to see what additional measures can be implemented to help increase pedestrian safety and it suggested that these measures are combined with the above.

*Conclusion.*

The proposed development would not generate any significant additional traffic or indeed car parking demand that would adversely affect the adjoining highway network. Subsequently Transportation and Highways would have no objection to the above planning application on highway or traffic implications providing the applicant agrees the following.

Conditions.

1, to provide a contribution towards schemes aimed at providing localised highway improvements / traffic calming including the provision of 20mph speed limit or zones, upgrading of the existing footway, kerbs and paved areas, new signage and carriage way markings including traffic management.

Reason: To improve conditions for pedestrians students attending the school

2, Submits a scheme for the management of the construction traffic associated with implementing this scheme, to the transport team for approval

Reason: To minimise the impact of construction vehicles on the adjoining roads.

3, Submits an interim travel will need to be provided for comments / approval prior to construction works starting on site and a full travel plan will be required prior to the occupation of the site.

Informative

The necessary works to construct the crossovers will be carried out by the Council at the applicant's expense once all the necessary internal site works have been completed. The applicant should telephone 020-8489 1316 to obtain a cost estimate and to arrange for the works to be carried out.

Building Control – Recommend that the Fire Brigade are consulted formally

Bounds Green & District Residents Association – Welcome the new improved facilities however they have the following comments to make - as summarised:

- The new entrance to the school is immediately adjacent to a shared access road with Alexandra Palace School which seem illogical given the potential safety factors that may arise;
- Would like to see dedicated areas where the local community may use the facilities during the evenings and weekends;



- Although some bicycle parking is shown more should be provided in the form of covered enclosures;
- It is disappointing that the new buildings were not arranged more effectively to free up more of the grounds for recreational purposes.

Local residents – Letters of objection have been received from the residents of No's 23 & 31 Rhodes Avenue, who object to the proposal on the following grounds (as summarised):

- Existing site is too small and to increase number of pupils and staff will only increase motor and pedestrian traffic;
- Parking and access to the road - already impossible to park outside or anywhere near one's property during the hours of 8am to 4.30pm, problems also double parking across driveways;
- New access point will be potentially a danger spot for children;
- Problem of teaching staff other persons smoking on Rhodes Avenue which is unpleasant will be increased with more staff;
- Construction traffic will clog up already busy minor roads;
- The current school fencing and mature trees are an integral part Rhodes Avenue's character, the removal of a large number of trees together with the installation of an inappropriately large entrance and intrusively high fencing will give the impression of a prison and be damaging to the character of the road;
- Removal of green aspect,
- Do not want speed 'calming measures', street furniture, signs as they will change the character of the road from a residential road to a school entrance;
- Lack of consultation.

A letter of support has been received from No 48 Bidwell Gardens, however concerns about the impact on roads and need for repairs post construction have also been made.

Rhodes Avenue Residents Association – Inadequate consultation

## **RELEVANT PLANNING POLICY**

### National Planning Policy

PPS 1: Sustainable Development & Climate Change

PPG2 2: Green Belt

PPS 9: Biodiversity and Geological Conservation

PPG 13: Transport

PPG 17: Sports and Recreation

PPS 22: Renewable Energy

PPG 24: Planning and Noise

PPS 25: Development and Flood Risk

## The London Plan – 2008

2A.1 Sustainability Criteria  
3A.18 Protection and Enhancement of Social Infrastructure and Community Facilities  
3A.24 Education Facilities  
3C.21 Improving Conditions for Walking  
3C.22 Improving Conditions for Cycling  
3D.14 Biodiversity and Nature Conservation  
4A.1 Tackling Climate Change  
4A.2 Mitigating Climate Change  
4A.3 Sustainable Design and Construction  
4A.4 Energy Assessment  
4A.7 Renewable Energy  
4A.12 Flooding  
4A.13 Flood risk management  
4B.15 Archaeology

## Adopted Unitary Development Plan, 2006

Policy G1 Environment  
Policy G2: Development and Urban Design  
Policy G9 Community Wellbeing  
Policy UD2 Sustainable Design and Construction  
Policy UD3 General Principles  
Policy UD4 Quality Design  
Policy UD7 Waste Storage  
Policy ENV1 Flood Protection: Protection of Floodplain, Urban Washlands  
Policy ENV2 Surface Water Runoff  
Policy ENV3 Water Conservation  
Policy ENV6 Noise Pollution  
Policy ENV7 Air, Water and Light Pollution  
Policy ENV11 Contaminated Land  
Policy ENV13 Sustainable Waste Management  
Policy M3 New Development Location and Accessibility  
Policy M4 Pedestrian and Cyclists  
Policy M5 Protection, Improvement and Creation of Pedestrian and Cycle Routes  
Policy M10 Parking for Development  
Policy OS5 Development Adjacent to Open Space  
Policy OS6 Ecological Valuable Sites and their Corridors  
Policy OS11 Biodiversity  
Policy OS17 Tree Protection, Tree Masses and Spines

## Supplementary Planning Guidance

SPG1a Design Guidance and Design Statements  
SPG4 Access for All – Mobility Standards  
SPG5 Safety by Design  
SPG7a Vehicle and Pedestrian Movement  
SPG7b Travel Plan / SPG7c Transport Assessment

SPG8b Materials  
SPG8c Environmental Performance  
SPG9 Sustainability Statement Guidance

### Other

CABE Design and Access Statements.  
The Mayor's Energy Strategy (February 2004)

## **ANALYSIS/ASSESSMENT OF THE APPLICATION**

The main issues in respect of this application are considered to be: (1) the principle of development/ expansion; (2) design, built form and layout; (3) trees, landscaping and impact on ecology; (4) transportation, parking and access (5) sustainability, renewable energy and environmental issues and (6) impact on residential amenity.

### **1 PRINCIPLE OF DEVELOPMENT/ EXPANSION**

As outlined above the proposal is to expand Rhodes Avenue Primary School from a 2 form entry to a 3 form entry and to improve existing condition and suitability issues. This will be delivered by refurbishment and extensions to the school.

The site is well established for education purposes and has been used for such a purpose since the 1930s. The existing building stock are in a varied state of repair and the adhoc manner in which they have developed over the last 80 years means that the school has no clear identity and overall the accommodation is not ideal for modern day education/ learning purposes. For instance many of the existing classrooms are a third smaller than current recognised standards which affect the delivery of modern education curriculum. There are also level differences within the school building (junior and infants building) which are not compliant with current standards as well as level changes within the external play areas. Movement and circulation between teaching blocks is greatly extended by the position and layout of buildings on site, while access for visitors is not well defined and requires using the side service road which has an inadequate pavement. The majority of the building fabric on site is also not in accordance with current insulation and ventilation standards. The 1930s building has many defects, including single glaze windows which are in part rotten.

The refurbishment and extensions to the school seeks to:

- To provide sufficient place for more local pupils;
- Have the necessary accommodation to maintain and develop an outstanding school;
- To provide high quality learning environment;
- Provide enhanced learning through the delivery of ICT;
- Support extra-curricular activities;
- Offer intended services to the local community;
- Promote sustainability and energy efficiency.

The layout and physical design associated with the new buildings and refurbishment to the existing will provide a high quality environment which will provide additional spaces ranging from small group rooms to flexible large space; which will help provide a suitable environment for mentoring, informal learning, assembly and performance. The proposed redevelopment of the site will also retain a high level of external space. The sites external play space will be generous and will be approximately double government guidance for a three form entry.

The demand for places in and around Alexandra ward is high, and projections overall for Haringey show a continuing rise in primary numbers. Since 2005 there has been a sharp increase in birth rates. As noted above the capacity of the school will increase from 472 to 682, while staff numbers will increase from 66 to 106.

The proposed expansion of this school is in accordance with policy G9 'Community Well Being', which states that development should meet the boroughs needs for enhanced community facilities from population and household growth, with the objective of increasing the overall stock of good quality community facilities, especially in areas of shortage, and to improve existing facilities.

## **2 DESIGN, BUILT FORM & LAYOUT**

### Design & Built Form

Policy G2 'Development and Urban Design' and UD4 'Quality Design' states that development should be of high quality design and contribute to the character of the local environment in order to enhance the overall quality, sustainability, attractiveness, and amenity of the built environment. The objectives of the policy are to promote high quality design which is sustainable in terms of form, function and impact, meeting the principles of inclusive design and supporting sustainable development.

The proposal is to provide a purpose-built single storey Foundation building to the front of the site; set back 8.8m from Rhodes Avenue, following the demolition of the existing nursery building. The new building will be 20.5m in depth and 37.5m in width. The building will be largely timber clad (in sweet chestnut) above a brick plinth with some render. The use of timber cladding here is in response to its context within the greenest part of the site.

The WC block to the building will be highlighted in a blue render punctuated by porthole windows in the shape of plough group of stars. The building will have a butterfly roof finished in a lead grey colour and a maximum height of 5m.

The new key stage block 2 will be largely a two-storey structure (with a curve), which will project 2.5m beyond the rear elevation of the 1930s building and wrap around the Main Hall building. This block will also be clad in sweet chestnut (at first floor level) with buff fairfaced brick at ground level and in places coloured render finish to form a legible contrast between new and existing building. The building will have aluminium composite, timber framed double glazed windows. The two storey section of the building will have a timber framed arched 'Rodeca' roofing system (translucent

roofing panel) while the roof form facing the recreation grounds will be a ‘Saran’ roofing system (dark grey finish). Internally part of the two-storey structure will have a double height ‘learning village’ space.

The other extensions will include a triangular shaped single storey to the front of new key stage 2 building to provide a reception/ visitor area as well as a new linking corridor and single storey extension to the side of the remaining wing to the 1930s block. The design and appearance of these extensions will be similar to the Foundation block. It is proposed to repair and refurbish the existing buildings, including tiled pitched roofs.

The form and siting of the replacement building has been influenced by the requirement to build whilst the existing school continues on the site, but also a wish to provide a more integrated and larger area of external space. The external appearance and finish to proposed buildings are considered acceptable and will provide a legible contrast between new and existing.

### Access

The key building entrances will have level thresholds and the entrance doors (automatic) will comply with Building Regulation Part M. Corridor widths will comply with BB102 with routes over 2.7m wide. All single door widths into classrooms/offices will have clear opening widths of 900mm with double (corridor) doors having clear opening widths of 800mm per leaf. The upper floor of the Key Stage 2 block will be accessible by a lift.

Externally the landscaping strategy for the site will remove the need for stepped access which currently occurs on the site by means of releveling and the creation of ramped access. Two disabled car parking spaces will be provided.

## **3 TREES, LANDSCAPING & OPEN SPACE**

### Landscaping

A detailed landscaping plan has been submitted with the application and includes a number of different landscape elements and useable external spaces: such as an outdoor teaching area, a new landscaped central quad, a rubber surface play area, an amphitheatre, a sculptural landscaped mound, a play court, a multi use games area (MUGA), a natural play area. The MUGA will be located in the very northern corner of the site. This space will be not be externally lit.

The green space to the front of the site will be largely retained as a grassed area with mature trees. A new single decorative line of railings measuring 1800mm high in a black powder coat finish will be erected along the frontage of the site retaining the existing vegetation inside the boundary line where possible and planting an Escallonia hedge behind the fence for screening.

A new tree-lined boulevard which segregates pedestrian from the vehicular movement will be created. The boulevard will be finished in Tegula block paving set in horizontal bands, with avenue trees, concrete benches and lights set at regular intervals. This boulevard will create a direct connection and visual link to the new main entrance building. An entry courtyard area from Rhodes Avenue will be created around an existing oak tree, which will give the space a unique character.

The lower playground will be re-landscaped into a continuous area at one level. The edges will be developed with a stage, traversing wall and vegetable growing area. Natural play in the form of rocks, boulders and logs will be introduced, as well as more native planting. The area outside the dining hall will be decked to provide an outdoor eating.

The area of inaccessible woodland to the side of the existing play/ resource centre will be opened up by way of a crushed stone pathway, to provide safe and useful habitat for environmental study.

### Trees

An Arboricultural Report has been submitted with the application and provides details of individual trees across the site in accordance with BS 5837:2005 (Size, condition, retention category, and work required if any) as well as the root protection areas for each tree to be retained.

The site contains 104 trees across the site with some unusual specimens which are worthy of note. These include the old cedar tree which has fallen and survived to form an unusual specimen. It is supported by a prop. The site also has a very fine Pin Oak which is situated alongside Rhodes Avenue, but set back from the frontage hedge. Enclosed by buildings are a fine old Mulberry (T35) and a newly planted Indian Bean Tree.

The area know as the Spinney located to the south of the site has a mixture of mature trees within the canopy layer including mature horse chestnut, sycamore, lime, ash, hornbeam, elm, oak and field maple together with some dead trees. In addition the canopy trees include some unusual specimens including an Evergreen oak, purple plum and a sugar maple. The wood has a mixture of younger trees forming an understory to the mature trees. These are mainly sycamore, lime, oak, ash and elm. Some mature shrubs are also within this group and include laurel, elderberry, hazel and thorn.

The Arboricultural Report recommends the removal of two trees; a Cherry tree (T74) and a Holly (T93). The Cherry tree is showing signs of impaired chlorophyll synthesis which has resulted in yellowing and dieback of foliage. It is recommended that its condition be reviewed in 2010. The Holly tree shows signs of dieback with a hollow trunk and decay.

The root protection areas for trees have been provided. This information gives guidance on the area required to safe guard the health of the trees. Overall the proposed new buildings/ extensions can take place on site without affecting the trees on the site and their root protection area.

### Impact on Ecology

As part of the Screening Opinion a Phase 1 Ecological Survey (August 2009) was submitted in addition to a Tree Assessment: incorporating a habitat survey and arboricultural map.

The site largely comprises of hard standing and buildings with amenity grassland and a small broadleaf woodland that is located on the eastern boundary of the site. The school grounds are managed for informal play (soft/hard). The site is partly bounded by defunct and intact hedges, the latter being located alongside Rhodes Avenue. The amenity grassland is species-poor and is therefore considered to be of negligible ecological value. All trees on site are above 5m and although the trees provide some habitat for breeding birds they are not considered to be of significant ecological value given that there is alternative nesting habitat suitable in the adjacent spinney; the spinney will not be affected by the development.

The Ecological Survey states that the buildings on site have been identified as having medium potential to support roosting bats. Whilst the school is located in an urban environment, the school lies adjacent to a golf course that would provide excellent foraging activity for bats. In addition, the woodland and trees within the school grounds also offer excellent opportunities for roosting and foraging bats. The brick buildings to be demolished have gaps under the roof felt, under tiles, behind fascia boards and under the eaves; all of which have potential to supporting roosting bats. Further survey of the buildings to be demolished is required in order to determine if bats are roosting on site. Other features within the school grounds (excluding buildings) and the proposed development can be considered to have a low ecological value.

The design proposal will not impact the existing area of Metropolitan Open Land on the site. It is proposed to bring an area of inaccessible habitat area within the site boundary into use together with relandscaping areas of existing play space. Overall it is accepted that the scheme has been well designed to minimise the loss of habitats, in particular through the retention of a high number of trees on site and by siting the new development away from the Spinney.

## **4 TRANSPORTATION, CAR PARKING & ACCESS**

In accordance with the requirements of SPG7c a Transport Assessment (TA) has been prepared by Colin Buchanan. The TA provides an assessment of the likely traffic generation associated with the proposed development, an assessment of the impact of the development on the local road network and an assessment of the accessibility of the site.

### Public Transport Accessibility

The application site is located within a low PTAL area of 2.

### Vehicle Accesses and Parking

There are four accesses within the school area, two of them are located on Rhodes Avenue and another two located on Albert Road. The proposed development will have 9 car parking spaces including 2 disabled spaces. In addition to this, there will be adequate cycle parking spaces in the form 30 'Sheffield' cycle stands.

### Traffic Generation

The TA has identified that the proposed increase in further pupils and staff will not have a significant impact on the surrounding highway and transport network.

The preferred mode of transport will remain as current - i.e. "walk" (currently it is 85.2%). The existing modal share distribution of "Walking" as mode of transport, the number of pupils would increase from 397 to 574, whereas staff from 21 to 33. The use of car would increase from 26 to 42 (i.e pupils dropped off at the school), whereas staff numbers would increase by 13 to 19.

The expected traffic impact of increase in car trips at the junction of Rhodes Avenue/Albert Road ("T" priority junction) has been analysed and it has been determined that the extra trips can be easily accommodated within the existing road network with no detrimental impact on traffic.

A parking impact review has also been undertaken and it has been determined that the majority of staff travelling to school arrive early morning hours to get a parking place. The TA concluded that because of the limited number of parking spaces within the school, there will be some overspill onto the neighbouring roads.

The TA recommends that the school Travel Plan should set 'SMART' objectives and encourage sustainable transport measures to achieve modal shift from 'Car' to other modes such as "Walking and Cycling".

It is deemed that because of the small catchment area for the school and the associated high numbers of children, who walk to school, the projected increase in traffic generation associated with the increase in pupil/ staff numbers will not have a significant impact on the adjoining roads.

### Walking/ Cycling

As noted above the preferred mode of transport to the school is "walking" with a largest number of pupils travelling to/from school. Pedestrian access to the school will be improved through the creation of the new defined entrance to the school.



The pedestrian network is adequate with good quality footways, moderate street lighting and dropped kerbs on the roads surrounding the development. However, it is noted that there is no crossing facility in Rhodes Avenue. It is recommended that strong consideration should be given to safety measures in Rhodes Avenue and Albert Road, which would include a 20mph zone and a flat top speed cushions (without loosing on street parking spaces) on Rhodes Avenue, coloured surface treatment at the Rhodes Avenue/Albert road priority junction and a pedestrian refuge including 30mph vehicle activated traffic calming signs on Albert Road.

Given the nature of the school and age (between 3-11) of pupils; it is challenging target to increase cycling as a mode of transport.

## **5 SUSTAINABILITY, RENEWABLE ENERGY & ENVIRONMENTAL ISSUES**

Policy G1 “Environment”, states that development should contribute towards protecting and enhancing the local and global environment and make efficient use of available resources. The objective of the policy is to facilitate developments which protect and enhance the environment and operate in a sustainable and environmentally friendly manner. The Council will seek to ensure development schemes take into account, where feasible: environmentally friendly materials, water conservation and recycling, sustainable drainage systems, permeable hard surfacing and green areas, biodiversity potential, energy efficient boiler systems.

### Improving Energy Efficiency

As this building is a combination of new build and refurbishment, an objective of the overall project is to minimise the energy consumption of the existing building fabric. This will be achieved by

- Improving the thermal fabric by retro-fitting internal insulation within the existing buildings and providing cavity wall insulation;
- Replacing single glazing with double glazing;
- Replacing all heating pipework and controls to improve heating distribution system and efficiency;
- Providing thermostatic radiator valves to all existing radiators and providing highly efficient underfloor heating to new build areas with zone control;
- Replacing all lighting with energy efficient fluorescent lighting with high frequency ballasts;
- Providing daylight and occupancy sensors on all lighting so lighting remains off when not required;
- Replacing existing roofs.

Such measures will contribute to creating more energy efficient buildings and will help reduce the overall carbon footprint of the building.

## Use of Renewable Energy

In accordance with the requirements of the London Plan, an assessment of the potential contribution of renewable energy technologies for this development was undertaken. As shown below a list of potential renewable technologies were considered, namely:

- Air source heat pumps - viable for the new build elements but not existing areas as this is a low temperature system - existing areas of school will require higher water temperatures to radiators.
- Biomass – is identified as a suitable technology for the site as a district heating system can provide all heating and hot water, however the cost premium of installing such a system is identified as not being viable for this project;
- CHP - not viable as there is insufficient annual heat demand;
- Solar thermal - the school is not open during the summer term and also has a minimal hot water demand therefore this is seen as not being viable. If the school has large shower facilities for sports fields or a swimming pool this would then become viable;
- Photovoltaics - were not considered economically viable to provide 20% of the renewable energy contribution to the site; however to provide 20% energy demand would require 400m<sup>2</sup> of PV at a cost of £520,000. The School however are currently applying for a grant to fund 23m<sup>2</sup> of PV panels to be located on the roof of the Year 6 building. This PV array will generate 2,530kWh of electricity for the school, off-setting 1,068 kgCO<sub>2</sub>.

The use of an air source heat pump system has been identified as the preferred renewable technology for the Foundation Stage building. The 'Energy Statement' demonstrates this will meet over 20% of the buildings energy demand. As outlined above because the building will not be intensively used during the summer months it is not viable to include solar thermal panels in the current design as the hot water generated will not be used, and therefore the heat would not be drawn off from the panels which could damage them.

A BREEAM pre-assessment has been submitted which shows that the development is anticipated to achieve a 'very good' rating.

## Flooding

As outlined above in the comments from the Environmental Agency (EA) the site lies within a Flood Zone 1 area, defined by Planning Policy Statement 25 as having a low probability of flooding. However, because of the scale of development and its impact on surface water run-off if not managed effectively, the Agency requires a flood risk assessment (FRA) to be submitted. A FRA has now been submitted and the EA have been consulted on this.

In terms of drainage the FRA states that there is an unrestricted separate foul and surface water drainage system provided throughout the school, which in turn connects into the adopted Thames Water sewers in Albert Road. The report states that the sub-soils comprise of London clays and therefore the potential to use

infiltration devices such as soakaways are limited and therefore a number of alternative SUDS devices are to be provided on the scheme: rainwater harvesting and permeable paving.

Within the re-development of the school it is proposed to provide 2 No below ground 'rain water harvesting tanks' (32,000l tank for the KS1/KS2 block and 7000l tank for the Foundation block) which will be used for the flushing of toilets (as shown in drainage layout in Appendix G).

The majority of the hard paved areas on the site will be either permeable block paving (Piora) or permeable asphalt. The design of these areas will need to consider the permeability of the sub-soils below..

The FRA report states that the existing school has an impermeable area of 4310m<sup>2</sup> which currently drains to sewers. By incorporating permeable paving into the new scheme, the impermeable area for the new development that will continue to drain to sewer will be reduced to 3430m<sup>2</sup> i.e. 20% lower than the existing situation. The introduction of the permeable paving will also have the benefit of reducing the volume of surface water discharging from the site. Consequently the risk of sewer flooding within and beyond the site should reduce as a result of the new proposals.

Officers are still awaiting comments from the EA but are satisfied that by incorporating the above measures, the proposed development will comply with the requirement of PPS25, by protecting the users of development and reducing the flood risk to third parties beyond the site.

### Environmental Impact Assessment

In line with the requirement of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 a screening opinion was submitted to the LPA. These regulations require urban development projects with a site area greater than 0.5 hectares, to submit a screening opinion to the LPA to assess the requirement for an Environmental Impact Assessment (EIA).

As the proposed redevelopment of the site does not constitute a change in use or result in not a significant change in building footprint an EIA was not considered necessary in this case. The impacts of the development (i.e. increase intensity of use) could be assessed in the context of the planning application.

### Archaeology

An Archaeological Desk-based assessment has been submitted with the application. The assessment has revealed that the school site was first occupied in the early 19th century, when Tottenham Wood House was constructed for a large estate. The estate was eventually sold off during the later 19th and early 20th centuries, and the house was used as the clubhouse for the nearby Muswell Hill Golf Club until 1932, when it was demolished. Its portico survives and still stands in the school grounds. A school was constructed on the site in 1908 as a temporary council school. This closed in 1920 and the building was demolished, possibly at the same time as the house. The

present school opened in 1930 and the sites of the former school and Tottenham Wood House were levelled to become the existing play areas. The current proposals are mainly focussed on and around the existing buildings and the sites of the earlier buildings should be largely unaffected, although the site of the house may be affected by landscaping and the construction of the new Foundation Stage building.

It is not known how much, if anything, of the house and early school building survives below ground and it may be desirable to investigate the site of the house through trial trenching to identify the extent and condition of any surviving remains. This would allow the full impacts of the scheme to be assessed. It is assumed that the site of the early school, which currently lies below the tarmac playground, will be unaffected.

The potential for other previously undiscovered archaeological sites or features within the school grounds is considered to be low; however the report recommends archaeological monitoring during the groundwork phases of the construction and landscaping to record any buried remains exposed by the works.

## **6 IMPACTS ON LOCAL RESIDENTIAL AMENITY**

Bearing in mind the existing site layout and its relationship with neighbouring properties, the proposed redevelopment of this site and its associated intensification in the use, it is considered that the proposal will not adversely affect the amenities of nearby residents. Much of the new development on site, in particular the new two-storey aspect will be located on the lower end of the site, well away from the properties on Rhodes Avenue. The new foundation block has been kept to single storey and has been sited so that it does not adversely affect the open aspect to the front of the site as viewed from the properties opposite on Rhodes Avenue.

To enable the continued running of the school, it is proposed that the works be carried out in three phases. The first phase will be constructed on the south eastern area of the site to create the new foundation stage building. Phase 2 will involve the demolition of the existing infants' accommodation on the northern end of the site replaced by a new two storey Key Stage 2 building. The final phase will be the refurbishment of the existing 1930s building and an extension housing the new infant's classrooms. Works are programmed to commence on site in the summer of 2010 and final completion is due November 2012. Construction traffic associated with the three different phases will be managed from different access points: Phase 1 from Rhodes Avenue, Phase 2 from Alexandra Park Secondary School and Phase 3 from the Spinney. Such measures will help minimise the disturbance associated with construction and its impact on the amenities of nearby residents.

## **SUMMARY AND CONCLUSION**

The redevelopment of the Rhodes Avenue Primary School involving remodeling, refurbishment and new build will replace the dated and substandard facilities, providing enhanced facilities for teaching and learning. It is considered that the layout, design and external appearance of the development will be in keeping with the surrounding area and its setting adjacent to Metropolitan Open Land (MOL). The scheme has been designed sensitively in relationship to adjoining residential

properties and the ecological area on site. The design and materials will enhance thermal and acoustic insulation, natural light and ventilation thus improving energy efficiency and comfort. Landscaping and grounds improvement will further enhance the school environment and the facilities available to students and the community generally. On balance, the transport, access and parking arrangements are considered satisfactory in light of the existing arrangement, the proposed travel initiatives and the small catchments area for this school.

Having considered the proposal against the adopted Haringey Unitary Development Plan and adopted Supplementary Planning Guidance and taking into account other material considerations, Officers consider the proposed development to be acceptable and that planning permission should be granted subject to appropriate conditions.

## **RECOMMENDATION**

### **GRANT PERMISSION**

Registered No. HGY/2010/0055

Applicant's drawing No.(s) 18631A-1 - 14 incl.; 0819 A-G000A; 0819 A-F-G200-P-00-01B; 0819 A-KS1-G200-P-00-01B; 0819 A-KS2-G200-P-00-01B;0819 A-KS2-G200-P-01-01A; 0819 A-F-G200-P-Rf-01A; 0819 A-KS1-G200-P-Rf-01A;0819 A-KS2-G200-P-Rf-01A; 0819 A-F-G200-E-01A; 0819 A-KS1-G200-E-01B;0819 A-KS2-G200-E-01B; 0819 A-F-G200-S01A; 0819 A-KS1-G200-S01A;0819 A-KS1-G200-S01A; 0819 B-500; 0819-LA-G700 - 705 incl., 710, 711, 713, 715 - 720 incl., 740, 750 all rev 3

Subject to the following condition(s)

### **IMPLEMENTATION**

1. The development hereby authorised must be begun not later than the expiration of 3 years from the date of this permission, failing which the permission shall be of no effect.

Reason: This condition is imposed by virtue of the provisions of the Planning & Compulsory Purchase Act 2004 and to prevent the accumulation of unimplemented planning permissions.

2. The development hereby authorised shall be carried out in complete accordance with the plans and specifications submitted to, and approved in writing by the Local Planning Authority

Reason: In order to ensure the development is carried out in accordance with the approved details and in the interests of amenity.

## EXTERNAL APPEARANCE

3. Notwithstanding the description of the materials in the application, no development shall be commenced until precise details of the materials to be used in connection with the development hereby permitted have been submitted to, approved in writing by and implemented in accordance with the requirements of the Local Planning Authority.

Reason: In order to retain control over the external appearance of the development and in the interest of the visual amenity of the area.

4. Notwithstanding any indication on the submitted drawings, details of the siting and design of all walls, gates, fencing, railings or other means of enclosure shall be submitted to and approved in writing by the Local Planning Authority prior to the commencement of the development. The walls/gates/fencing/railings/enclosures shall be erected in accordance with the approved details following completion and occupation of the building hereby approved.

Reason: In order to retain control over the external appearance of the development and in the interest of the visual amenity of the area.

## SITE LAYOUT/ NATURE CONSERVATION

5. Notwithstanding any indication on the submitted drawings details and samples of the materials for those area to be treated by means of hard landscaping (permeable surfaces) shall be submitted to and approved in writing by the Local Planning Authority prior to the commencement of the development. Thereafter the hard landscaping shall be carried out in accordance with the approved details following completion and occupation of the building hereby approved.

Reason: In order to retain control over the external appearance of the development and to provide a permeable surface for better surface water drainage on site.

6. Notwithstanding the details of landscaping plan a schedule of those new trees and shrubs to be planted together with a schedule of species shall be submitted to, and approved in writing by, the Local Planning Authority prior to the commencement of the development. Thereafter the approved scheme of planting and landscaping shall be carried out and implemented in strict accordance with the approved details in the first planting and seeding season following the completion of development. Any trees or plants, either existing or proposed, which, within a period of five years from the completion of the development die, are removed, become damaged or diseased shall be replaced in the next planting season with a similar size and species. The landscaping scheme, once implemented, shall be maintained and retained thereafter to the satisfaction of the Local Planning Authority.

Reason: In order to ensure a satisfactory setting for the proposed development and in the interests of the visual amenity of the area.

7. The development permitted by this planning permission shall be carried out in accordance with the approved Flood Risk Assessment (FRA).

Reason: To prevent flooding by ensuring the satisfactory storage and disposal of surface water from the site.

8. No development shall take place until a walk-over survey (in conjunction with the Council's Ecology Officer) has been carried out for the presence of bats on site and has been approved in writing by the Local Planning Authority. Should the presence of bats be found, then no development shall take place until full details of measures for bat migration and conservation have been submitted to and approved by the Local Planning Authority.

Reason: To safeguard the ecology of the Metropolitan Open Lane and to protect species in line with UK and European Law.

## TRANSPORTATION

9. Notwithstanding the information submitted with the application, details of an interim Travel Plan (prior to construction) followed by a full Travel Plan (post construction) shall be submitted to and approved in writing by the Local Planning Authority. The details submitted shall be designed to manage the transport needs of school staff, pupils, parents and visitors, in order to demonstrate a car restraint policy for the site, minimise car usage and promote alternative modes of transport. The approved scheme shall be implemented at the time of first occupation of the development and shall be permanently retained in operation thereafter.

Reason: To minimise car use and promote alternative modes of travel for staff, parents, pupils and visitors to and from the site.

## SUSTAINABILITY/ ENVIRONMENTAL PERFORMANCE

10. A certificated BREEAM Post Construction Review, or other verification process agreed with the Local Planning Authority, shall be provided, confirming that the agreed standards have been met, prior to the occupation of the development.

Reason: To ensure that the proposal complies with the principles of sustainable development

11. A plan indicating the location of the air source heat pumps to be installed in the Foundation block and the associated calculations showing compliance with the reduction of 20% CO<sub>2</sub> shall be provided to and approved in writing by the Local Planning Authority, prior to the occupation of the building. Thereafter the renewable energy technology/ system shall be installed in accordance with the details approved and an independent post-installation review, or other verification process agreed, shall be submitted to the Local Planning Authority confirming the agreed technology has been installed prior to the occupation of the building, hereby approved.

Reason: To ensure the development incorporates on-site renewable energy generation to contribute to a reduction in the carbon dioxide emissions generated by the development, in line with national London and local planning policy.

## CONSTRUCTION

14. No development hereby permitted shall commence until a Demolition Method Statement has been submitted to and approved by the Local Planning Authority. The statement shall include a methodology for demolition, mitigation for impacts arising from demolition (including dust and noise) and the named contractor(s). Thereafter, all demolition shall be undertaken in accordance with the approved statement unless otherwise agreed with the Local Planning Authority

Reason: In order to minimise the impact of the works on the amenities of neighbouring occupiers.

15. The construction works of the development hereby granted shall not be carried out before 0800 or after 1800 hours Monday to Friday or before 0800 or after 1300 hours on Saturday and not at all on Sundays or Bank Holidays.

Reason: In order to ensure that the proposal does not prejudice the enjoyment of neighbouring occupiers of their properties.

16. Prior to the commencement of work a Construction Management Plan including a scheme for the management of the construction traffic associated with implementing this scheme, shall be submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure the construction period of the development does not result in unreasonable disturbance for neighbouring properties and to minimise vehicular conflict at this location.

17. The developer shall afford access at all reasonable times to any archaeologist nominated by the Local Planning Authority, and shall allow that person to observe the excavation and record items of interest and finds.

Reason: To enable archaeological investigation of the site.

INFORMATIVE: The applicants will be required to provide a contribution towards schemes aimed at providing localised highway improvements / traffic calming including the provision of 20mph speed limit or zones, upgrading of the existing footway, kerbs and paved areas, new signage and carriage way markings including traffic management.



INFORMATIVE: The necessary works to construct the crossovers will be carried out by the Council at the applicant's expense once all the necessary internal site works have been completed. The applicant should telephone 020-8489 1316 to obtain a cost estimate and to arrange for the works to be carried out.

## REASONS FOR APPROVAL

The reasons for the grant of planning permission are as follows:

(a) The proposal is acceptable for the following reasons:

I. The design, form, detailing and facing materials of the proposed development is considered acceptable and has been designed sensitively in relationship to adjoining properties, the ecological area on site and its setting adjacent Metropolitan Open Land (MOL).

II. The proposal will provide a high quality education facility which will provide enhances opportunities for teaching and learning, with wider benefits to the local community.

III. The transport, access and parking arrangements are considered satisfactory in light of the existing arrangement, the proposed travel initiatives and the small catchments area for this school.

(b) The proposed development accords with strategic planning guidance and policies as set out in the Adopted Haringey Unitary Development Plan (July 2006); in particular the following G1 'Environment', G2: 'Development and Urban Design', G9 'Community Wellbeing', UD2 'Sustainable Design and Construction', UD3 'General Principles', UD4 'Quality Design', ENV1 'Flood Protection', ENV2 'Surface Water Runoff' and OS17 'Tree Protection, Tree Masses and Spines', OS5 'Development Adjacent to Open Space'; OS6 'Ecological Valuable Sites and their Corridors' and OS11 'Biodiversity' and supplementary planning guidance 'PG1a 'Design Guidance and Design Statements', SPG4 'Access for All - Mobility Standards', SPG5 'Safety by Design', SPG7a 'Vehicle and Pedestrian Movement', SPG7b 'Travel Plan', SPG7c 'Transport Assessment', SPG8b 'Materials', SPG8c 'Environmental Performance' and SPG9 'Sustainability Statement Guidance'.