ed toovey architects

St. Christopher's School Reception classrooms project

PLANNING APPLICATION SUBMISSION

DESIGN & ACCESS STATEMENT + SITE PHOTOGRAPHS

19 March 2021

Contents:

Introduction outline of proposals

- The address is:

  St Christopher's School
  32 Belsize Lane
  Hampstead
  London
  NW3 5AE

- The project involves proposals to partially demolish the frontage of two existing classrooms, and form an extension that creates more floor area and toilet accommodation for each classroom, in order to use the rooms for Reception Year classrooms. A small extension in the gap between the classroom and plantroom building, will create more external storage space.
- There are also proposals for external hard landscaping and use, to convert an existing car park area into a playground for Reception Year pupils.
- Additional sheltered cycle parking is to be provided
- This Statement supports a full planning application.
- As part of the planning application proposal, the School is applying increase the number of pupils permitted on the School site at any one time from 235 to 260 pupils, as an amendment to the current limit. The reasons for this and the operational needs driving the requirement for an additional teaching classroom are outlined in a separate document Planning Statement.

Planning context & background

- The planning context and background is explained in detail the Planning Statement.
- The School is in the Fitzjohns Netherhall Conservation Area, and has no listing or other special planning status.
- The School occupies a former Victorian residential building built in 1886.
- The appraisal of this street notes the following:
  - *No.32 [now a school] is a large detached three storey plus roof additions building, set back from the road, it was built with a drive and now has an assortment of outbuildings that do not enhance its appearance. An interesting feature is the large octagonal ventilation shaft for the Midland railway that rises through the middle of the building and is visible from Wedderburn Road and Belsize Lane.*

The School

- St Christopher's School was established in 1883 with the earliest written records appearing in 1889 of a small class begun by an enthusiastic educationalist in her father's drawing room. This developed rapidly into a preparatory school known as the

Hampstead Kindergarten and School. In 1919 the school acquired its current name. Larger premises were required and 32 Belsize Lane was vacant and available. In 1937, the School extended the gym to its present length and obtained the lease of 20 Lyndhurst Gardens, which became the Junior School. Other more recent extensions on the north side of the site were carried out in 2007, including the classrooms that are to be extended under this proposal.

- The School is a day-school for approximately 235 girls between the ages of 4-11 years old, with all the facilities on one campus at 32 Belsize Lane.
- The School also owns a single garage space at the rear of the property, accessed off Lyndhurst Gardens.

Operational Requirements

- The School currently only has one Class in Reception Year, due to shortage of space, whereas all the other Year groups have two Classes. This creates logistical difficulties for parents who would prefer their children to enter at Reception and stay in the School right the way through – at present there is a need for a second intake after the Reception Year, which is both disruptive and inefficient.
- The School favours class sizes of 20 pupils as giving the optimum size for the best quality of education.
- The proposal in this application will create the facilities for a two Reception Class Year Group, so that pupils can join at Reception and move seamlessly up through the School Years. This will simplify the arrangements for parents.
- Reception classrooms require additional floorspace, and toilet accommodation immediately adjacent to and accessed off the Classroom, when compared to classrooms for older years.
- They also require toilets accessible from the external space.
- In addition the Classrooms require direct and easy access to an external play space, of which part may be covered. External storage space is also necessary to accompany the playground.
- For safety, the playground needs to be screened off from the Service Yard, to avoid crossover of pupils and vehicles.
- While extending the Classrooms in depth, it is also important to maintain good natural ventilation and daylight.
- For the expansion of pupil numbers, the impact will be on the Reception Years and hence the new extensions proposed. All of the other School facilities are unaffected spatially by this proposed change.

- **Photographs of existing site**

Aerial bird's eye view from west [source Googlemaps] with existing classrooms on the right

View of main School building from Belsize Lane, at the pedestrian entrance to the site

View of north Classrooms block from Belsize Lane, at the vehicular entrance to the site

View of the eastern classroom, with plant room to the right, and car park area in front

View of the eastern classroom, at the south-east corner

View of the eastern classroom, with plant room to the right, and car park area in front

View of the roofs of the Classroom block, with raised lanterns and green sedum roof planting, and the canvas awning canopies to the right side

View of the "link" area with external covered space at steps and ramp

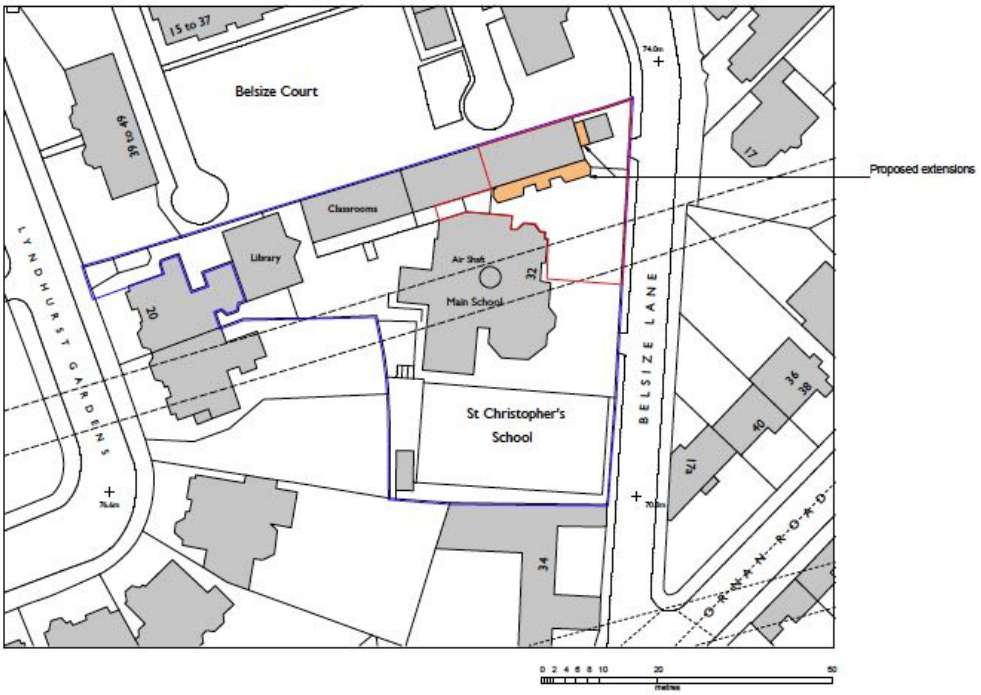
View looking west with main School on the left, Classroom block on the right

Design process - Assessment of building, site and context

Evaluation

Site:

- The site for these proposals lies at the north-eastern side of the School campus. The external area is currently a vehicular parking space associated with the vehicle entrance gates, with pedestrian access around that connects to the main entrance on the east side of the main School building, the original Victorian house.
- The development in 2007/08 provided a new single storey building, stepping up the natural slope of the ground towards the west, all along the northern boundary and right up against the party wall. This new building created new classrooms with external access and a tensile fabric canopy providing shelter to the entrances and connecting route. North of the wall is the Belsize Court residential estate, with large mature plane trees overhanging the School site.



Location plan with site in NE corner: refer to main drawing set for detail

- The building is expressed as a series of individual classrooms, each identified by glazed "lanterns" that are raised above the typical roof level to provide natural ventilation and daylight into the heart of the spaces.
- The building, constructed with concrete piled foundations and ground slab, steel superstructure framing and concrete roof slabs, is clad in vertical and horizontal stained timber boarding, with polyester powder coated grey aluminium windows and doors. The stepping roofs are all flat, with a dark grey waterproofing membrane and "green roof" sedum planting, which has developed reasonably well over the years.

- The external expression of the classroom building with the vertical timber board cladding is a deliberate and successful contrast with the red clay brick of the main School building. The timber is a reference to garden buildings, and was also selected for sustainability and carbon emission reduction reasons. The curved and lightweight form of the fabric canopies again provides another contrast against the more rigid rectilinear and darker form of the main classroom building. The design strategy has preserved the hierarchic importance and pre-eminence of the original brick house on the site which, though not listed, has a fine quality and presence that is characteristic of Victorian London residential development.
- The classroom sizes are suitable for older Year groups, but not for Reception.
- In terms of the external space, the area is used for vehicular parking and is finished in concrete block paving. On the east side a tall red clay brick wall defines the boundary with Belsize Lane.
- The smaller plantroom building, which is detached from the classroom building and sits at the east end adjacent to the gates, is finished in exactly the same style and materials, but is of slightly lower height.
- The school stores the recycle and waste bins in the area against the eastern boundary wall and against the plantroom building, for ease of collection. There is no physical separation between vehicle and pedestrian areas.
- The "Link" area is a small external space which has a pitched roof covering for shelter, in particular where the steps and ramp negotiate a subtle change in site levels. As the roof construction only has a relatively small rooflight, and the roof is low, the daylight to the space under is poor, and in particular adjacent classrooms receive very low levels of daylight from the south as a result, to the detriment of the interior environment.

Constraints

- Need to respect the character of the original Victorian house in style, finishes, and scale, which can be by means of contrast.
- Need to respect the character of the newer classroom building in style, finishes, and scale.
- Need to maintain the demure and "background" character of the classroom block in relation to the main house.
- Need to respect the amenity of adjacent properties and neighbours, especially on the north side, and also where visible from the street. The building cannot really be seen from other orientations except from School land.
- Need to respect the scale of the boundary wall.
- Need to fit in to the garden context of the School play areas.
- Need to protect all the trees on the site.

Opportunities

- Create an extension that relates to the timber clad classroom building in materials, scale and style, and supports the distinction with the main Victorian house.
- Re-use the roof canopy that shelters access from the School in the same way as existing.
- Provide classrooms that has excellent access out to the new outdoor play areas.
- Provide disabled access from the new extension to the playground.
- Need to use materials that blend and harmonise with the existing.
- Increase the area of external play space at the expense of car parking. Provide a sheltered and private space for young children, not visible from the street.
- Improve safety by creating clear barriers between play/access area and vehicle servicing area.
- The dark area under the roof at the "Link" area can be enhanced by increasing the area of roof-lighting, also to the benefit of adjacent classrooms.

Conclusions from evaluation

- The proposal for the new extension can enhance the setting of the main house and create great Reception Year classrooms, with little impact on neighbours.
- Creating a new play area from existing car parking is a functional and aesthetic improvement, while servicing is rationalized and kept separate from School activities.
- Safety will be improved by the clear screening of the vehicular parking space.
- The "Link" area can become an important celebratory space for the change in levels and provide improved daylight to adjacent classrooms.

Community and Council Consultations

- The School's intention was to hold public exhibition[s] of the proposals in the School Hall, and to invite local neighbours and residents in the immediate vicinity to view, discuss and comment on proposals. However due to the Covid situation this has not been possible.
- Consultation has been held with the Local Authority by means of a Pre-Application submission and meeting, and the advice in the Officer's Report has been followed in finalising the planning application information and design.

Social matters

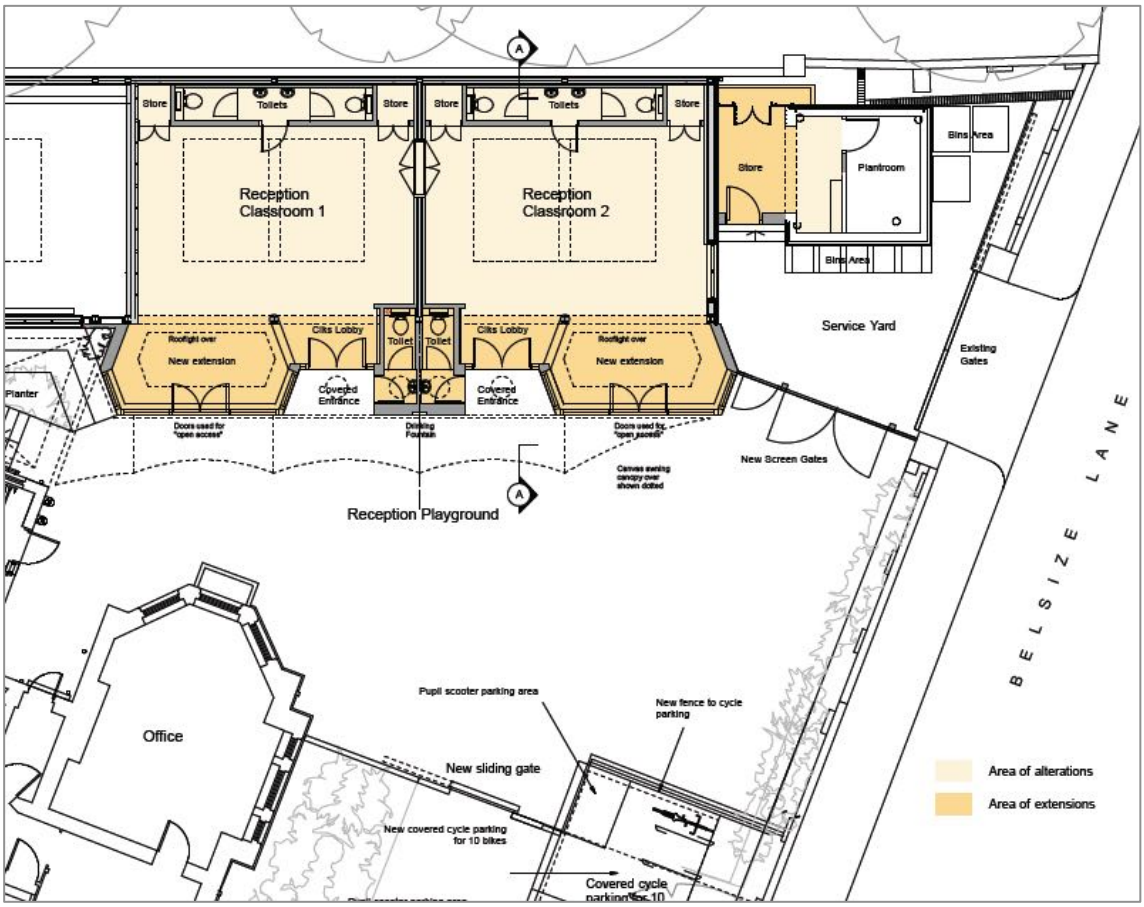
- The School provides a very valuable educational service to the local community.
- The School is making a long term commitment to this site by its investment in improving buildings and development.
- The development will enable the School to improve its teaching facilities, rationalize the 2-form system throughout all School Year groups, and thereby assist in achieving its primary goals of the highest standards of educational service to the community.

Design of new proposals

- The new extension to the two classrooms is to be formed on the south face, with the existing external wall demolished back to the frame.
- Each classroom will have a new "bay window" area, a recessed entrance lobby providing cover over the entry doors, and a single toilet accessed externally.
- The 30 degree angled form of the bays is a reference to the bay windows to the main Victorian house, and the angled sides of the "orangery" timber extension on the west side of the original house.

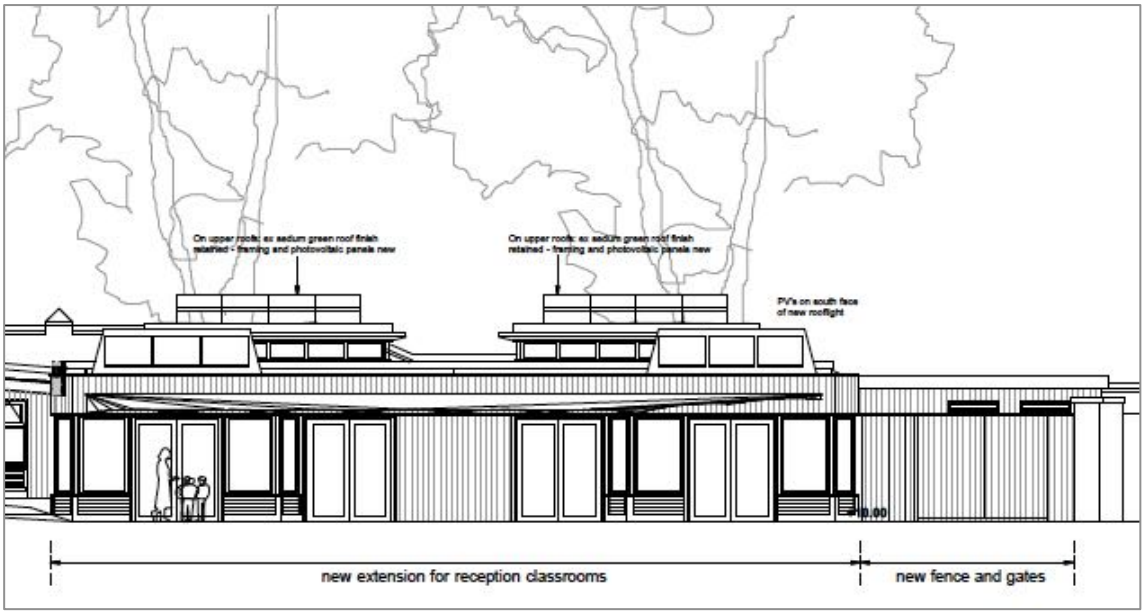
Photo of the original "Orangery" on the south side of the main house

- The angled walls inflect the space and provide more articulation to the façade, softening the relationship with the external space.
- The plan is symmetrical so that the entrances are together, either side of a single toilet block.
- The extension is flat roofed, but with northlight rooflights over the bays. These are important to bring more natural daylight and ventilation to the classroom interior, while avoiding the issues of glare assocaited with south facing glazing.
- Over each entrance door a circular rooflight defines this threshold, while each of the externally accessed toilets also has a rooflight for natural daylight.
- Internally, the intention is to create a service zone at the back of the classrooms, on the north side, so that each classroom will have two toilet cubicles and some dedicated storage space.



Proposed ground floor plan with extensions in orange: refer to main drawing set for details

- New doors formed between classrooms will allow the rooms to be flexible for supervision when appropriate.
- All of the toilets will have new extract ventilation flues up though the flat roofs.



Proposed south elevation: refer to main drawing set for details

- The general appearance of the extension is of a timber clad building with polyester powder coated aluminium glazed windows and doors, similar to the existing classroom building, with vertical stained boarding of the same width.

- On the south face, the tensile fabric awning and canopy structure will be re-fitted, to provide again the covered shelter as existing.

- On the east side a tall timber screen will continue the façade right up to the boundary wall, at one of the main brick piers. The finish of timber boarding will match in with the south extension. This screen, which will have pedestrian and vehicle gates included, will serve to enclose the service yard and delineate clearly the playground, forming a safe division between the two areas. The new screen will provide more viusual protection for the play area from the street as well.

Artist's impression of the south extension with new playground, eye level view from the east

- A second small extension is also proposed to connect the plantroom building with the teaching building, and create more storage space for external play. This extension will follow exactly the same style and materials as the south extension, and will help to maximise the use of space – the existing gap just creates an awkward space between buildings.

- The external play area will be designed with a special coloured surface for child safety, designed in patterns to be visually appealing for young children, but consistent with the existing colours and path surfaces.

- The design of the playground will include timber benches and some additional small tree and landscape planting.

- On the south side of the playground, a new low metal screen and sliding gate will divide off the area from the main entrance area, for the segregation of the younger pupils.

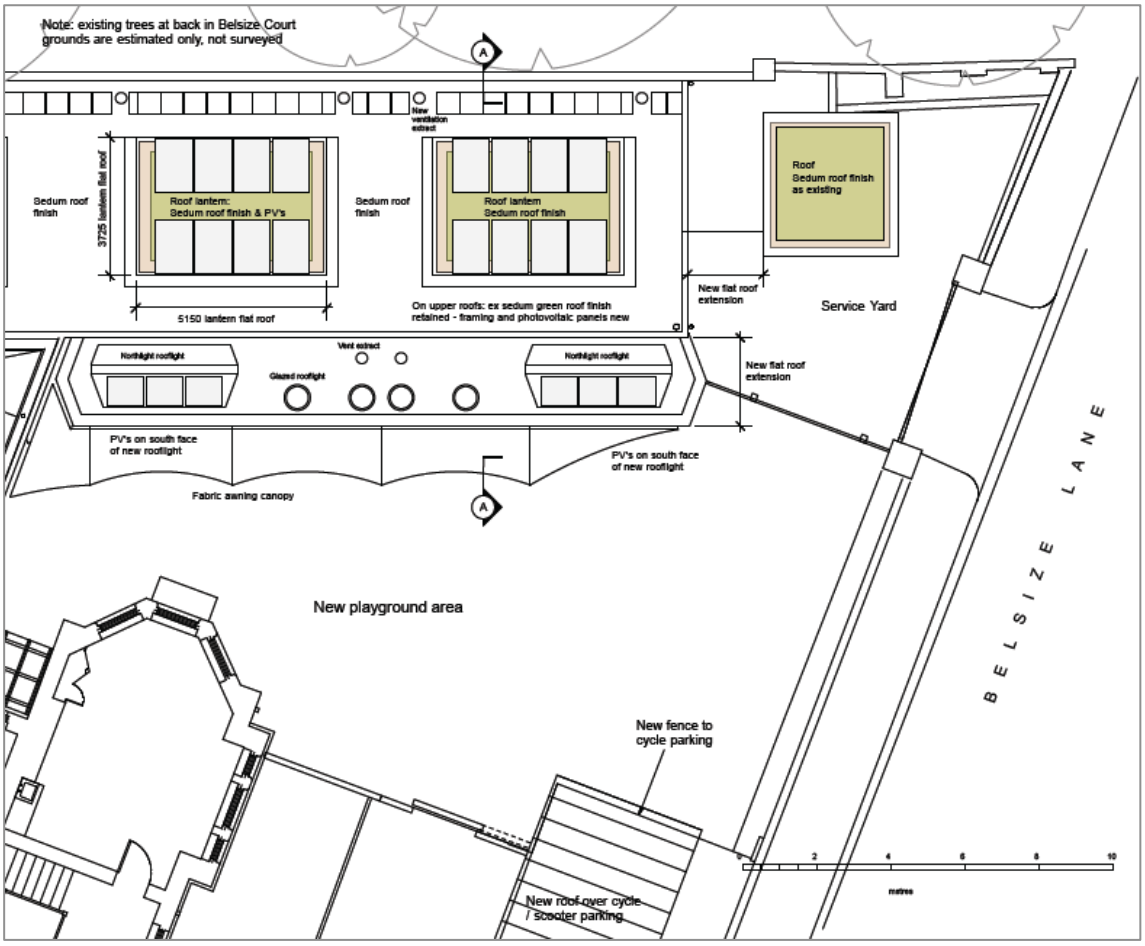
Artist's impression of the south extension with new playground, bird's eye view from the east

- The illustration at an earlier design stage from a bird's eye view shows how the proposals of the new extension with service yard screen will create a great environment for Reception Year pupils, sheltered and private from the street.

- The design proposal for this application now includes photo-voltaic panels to be mounted at roof level.

- This is a sustainable means of providing renewable energy and will demonstrate the School's commitment to long term energy saving.

- The roof plan on the following page illustrates the measures being proposed. The orientation of the panels is exceelent for functionality, and the photovoltaics can work in tandem with green sedum roofs.



Proposed roof plan with photovoltaics on roof: refer to main drawing set for details

Amount

- Approximate areas area as follows:

○ Existing buildings total area	=	1,621	m²	GIA
○ Demolitions area	=	0	m²	GIA
○ New extensions total area	=	42	m²	GIA
○ Proposed buildings total area	=	1,663	m²	GIA

Layout

- The plan layout creates a new extension on the south side of two existing classrooms. The extension will include classroom area, entrance lobby and new toilets.
- Access and entrances will be from the south, as at present.

- The steps and ramp at the "Link" area will be adjusted to suit the new layout, and all areas will be inclusive and wheelchair accessible.

Scale

- The new extension will be a single storey building with a general flat roof level below the height of the existing Classroom block roof. The northlights will be higher, but still below the top level of the Classroom block lanterns' roofs.
- The detail and windows for the new elevations will be consistent with the existing detailing.

Amenity

- There will be no negative daylight / sunlight impact on neighbours due to the low roof forms, which are lower than the existing buildings.
- There will be no increase in noise levels to neighbouring properties as a result of the proposals.
- None of the new windows face directly towards adjacent houses, respecting their privacy.
- Visually the construction materials, with high quality roofing, green roof finish and timber clad walls, will blend well into the garden setting and be consistent with the existing context.

Accessibility & Inclusivity

- The floor level throughout the new extension will be flush and level with existing floor areas and with the play areas outside.
- A fully compliant disabled wc is already available in the main School building in the immediate vicinity.
- The project will therefore maintain accessibility and inclusivity for all users and visitors.

Ecology & Landscaping

- The new extensions are being built on "brown field" areas that are currently hard-landscaped with concrete block paving finishes.
- The existing classroom building has green roof systems and these will be maintained. As the flat roofs to the new extensions are small in size and area, and have rooflights, vents and northlights that further reduce and complicate the roof surface, there is no proposal for green roof systems in this case.
- The garden areas will be reinforced with further planting as part of these works.
- No trees will be taken down or affected as part of this proposal.
- The School will be exploring the integration of educational nature tools and installations that may coordinate with the building, such as wildlife /insect habitat.

Trees and arboriculture

- The new extensions are not in close proximity to any existing trees, and none will be harmed by these proposals.
- The proposals will enhance landcsaping in the playground area to soften the area.
- The Arboricultural Report is included as a separate document, which notes as follows:

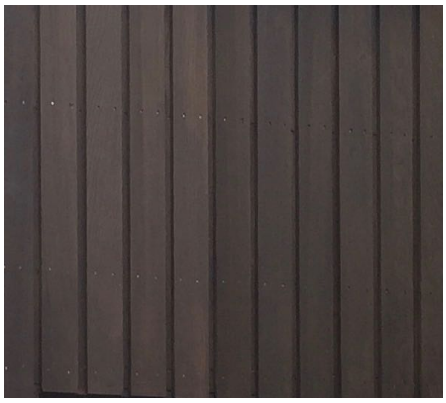
The report evaluates the trees within and adjacent to the above site, using the criteria and guidance set out in the British Standard 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations. The wider amenity and landscape values of the trees, as well as their useful life expectancies are determined, and as a result, a category grading to all trees for retention using the "Cascade Chart for Tree Quality Assessment" is assigned. A Tree Constraints Plan has also been drawn and appended to the report. The Plan illustrates the tree locations, their spatial requirements with any proposed development.

Structure

- Soil tests will be carried out to determine the optimum foundations, whether piles or strip footings. The existing classroom building has piled foundations so this may be the template for the new extensions. Foundations of lesser depth may be achievable pending confirmation of soils with low volume change potential determined by site specific soils testing and subject to a properly considered detailed design in accordance with the NHBC guidelines.
- The superstructure will be a steel primary frame with timber roof joists and reinforced concrete floor, with timber frame and masonry walls, similar to the existing classroom block.
- The RPA of local trees will not be affected by the construction of the proposed classroom extension and the local trees will come to no harm. There are no existing trees in the immediate vicinity of the proposed extensions.
- Local trees during the construction phase of the project.
- It is proposed to drain the new extension with free flowing gravity drainage system, with manholes for inspections and maintenance, connecting into the existing sewer system on the site.
- The project will involve new connections from the kitchen and toilets into an existing foul drain, and surface water connections.
- Ground surfaces will be permeable to encourage natural surface water dispersal into the ground. Surface water will be dealt with by porous surface finishes.

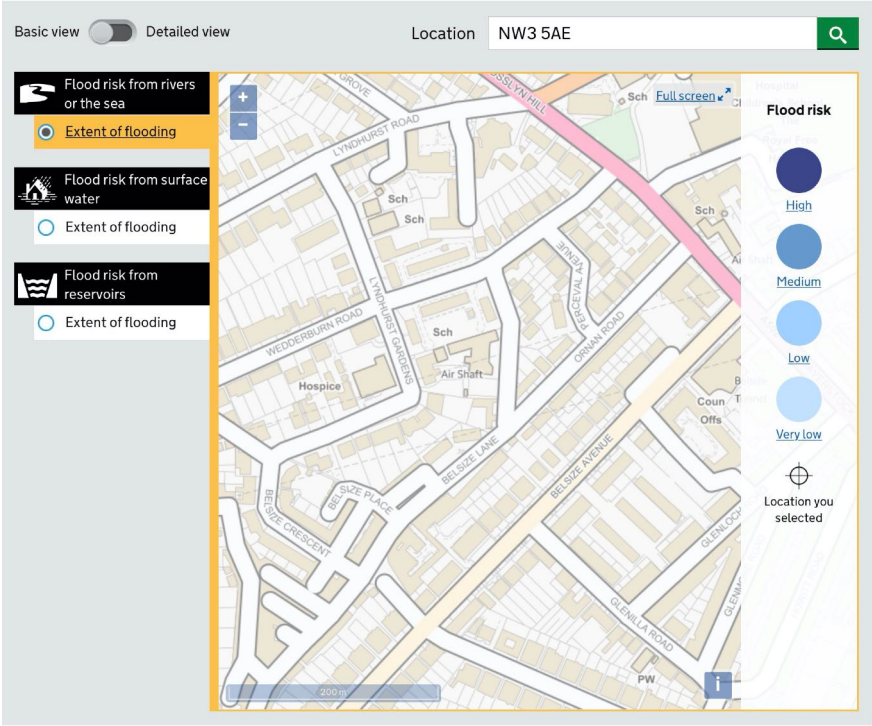
Appearance / materials

- Materials for the external fabric to harmonise with the existing Classroom building:
  - polyester powder coated metal windows / doors
  - stained timber vertical cladding
  - steel frame [concealed]
  - dark grey flat roof membrane, with natural zinc finish to northlights south face
  - polyester powder coated aluminium glass rooflights
  - polyester powder coated aluminium gutters and downpipes
  - the canopy structure will be steel frame with tensile fabric awning to match existing

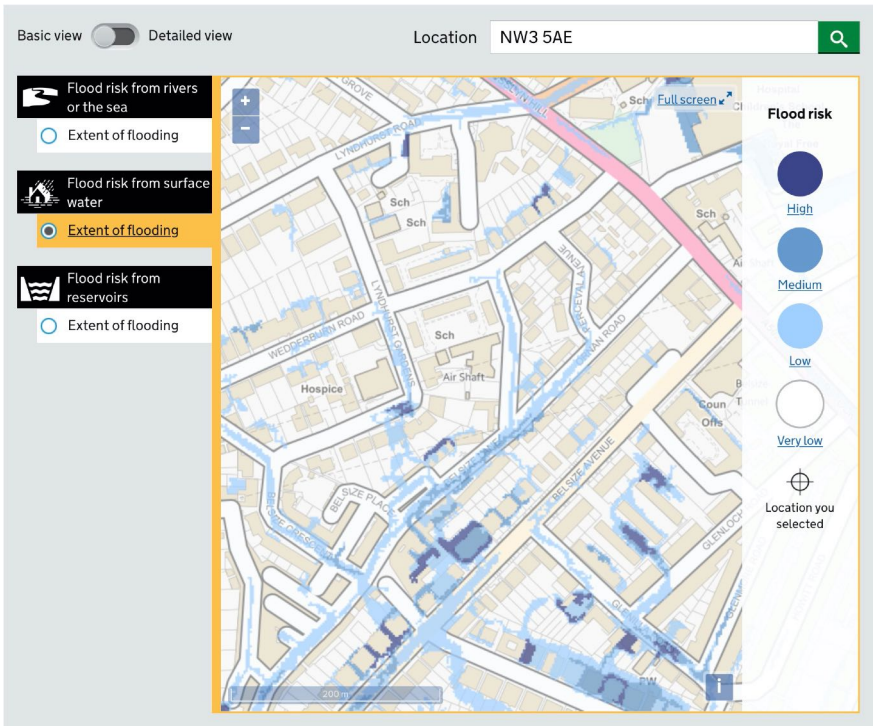
	
Roof finish: *Dark grey flat roof built-up system*	*Wall cladding:* *Vertical stained timber boards [may include coloured boards*
	
Glazed windows, doors [and louvres]: Polyester powder coated aluminium windows and louvres, 30% matt to selected colour	*Roof light: [example of circular glass rooflight or similar section] Polyester powder coated aluminium rooflight, 30% matt dark grey colour finish to blend with the roofing*

Flood risk

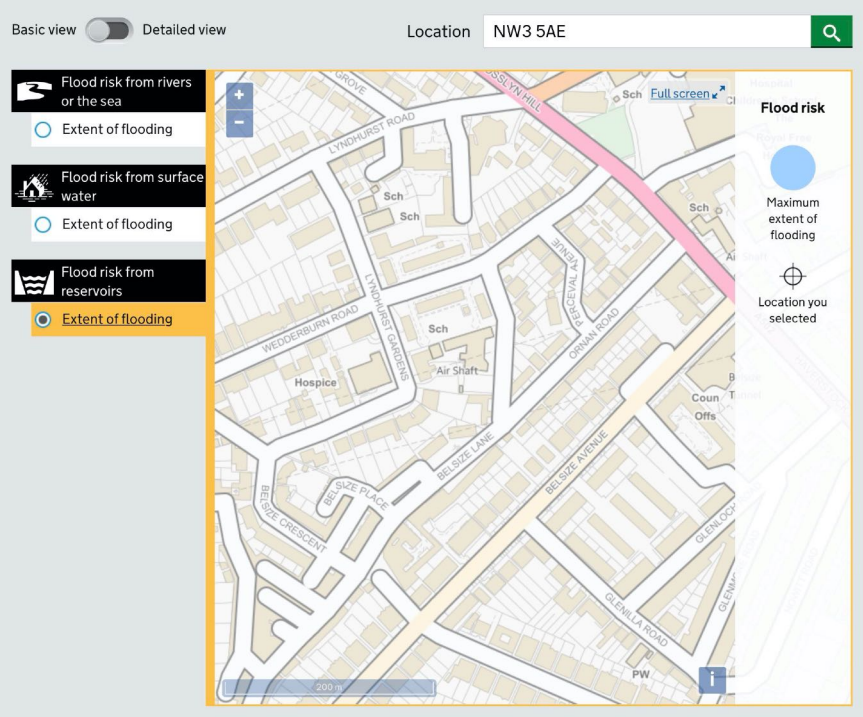
- The Environment Agency flood map demonstrates that no special flood protection is required on this site. The flood risk from surface water is shown in the bottom map, and shows that the site of the proposed extension is not in an area of likely flooding.



Government Long Term Flood Risk map: rivers & sea flood risk NW3 5AE



Government Long Term Flood Risk map: surface water flood risk NW3 5AE



Government Long Term Flood Risk map: reservoir flood risk NW3 5AE

Building Services and drainage

- The new extension has a floor area less than 100m² and less than 25% of the total floor area of the existing building - for building regulation compliance is to be assessed under Approved Document Part L2b (2013), which requires that new thermal elements are to be designed and constructed to a higher standard than the minimum Part L2b standards but does not require the extension to meet the new building energy emission reduction target.
- For ease of the installation and energy efficiency the new extension will be heated from the existing boilers in the plantroom building. The existing radiators are on the south wall of the classrooms, so these will need to be replaced with new systems.
- The extension will have openable northlights for natural ventilation, so no mechanical ventilation is envisaged for the classroom. The new toilets will have mechanical air extract with flues to above the flat roofs.
- The extension will be provided with openable windows allowing natural ventilation to the space.
- The location the new extension building enables connection of new drainage into the existing local school drainage system. The proposed new toilets will require new drainage runs to be installed under the existing concrete slabs, with connections within the School site.
- Energy consumption is reduced through the use of natural daylight and Low energy light fittings which will be used both internally and externally.

- Electricity use is to be metered and monitored to test performance in use.

Sustainability

- All the building elements will use high quality building materials which have been selected for their durability and ease of recycling when no longer required.
- Solid external walls will incorporate high levels of insulation for thermal efficiency.
- The use of timber cladding will assist in providing a low-carbon solution.
- Walls, roofs, windows and door are selected for their thermal performance in order to reduce the building energy requirements. Further energy efficiency gains are made through careful detailing of the fabric and junctions to provide good airtight seal and minimise cold-bridges.
- Climate change is combated through the use of natural ventilation utilising shaded sliding doors and roof lights.
- Water efficiency will be improved through the installation of new low water flow fittings and equipment.
- Generous new windows and north-facing rooflights will provide good daylight and reduce dependency on artificial lighting.
- The external canopy will reduce solar heat gain to the interior in summer and provide shading.
- Low energy lighting fittings will be used throughout the interiors.
- Materials for the new building, including timber and aluminium, are to be selected from sustainable sources.
- The photovoltaics provide sustainable renewable energy.

Traffic, transport and parking

- Please refer to separate documents for the Travel Plan and Transport Statement.
- The conclusion of the Travel Statement is as follows:

> *The range of measures employed as part of the application to reduce car use will ensure that the local policy requirement, which states that no additional car trips be generated by a school extension, will be achieved.*
>
> *It is considered that the development proposal is appropriate for the location, will not result in an impact upon the operation of the local highway and transport network, and is in accordance with relevant adopted national, regional and local policy guidance.*

- As part of the measures to ensure greater use of cycles, an additional 10 covered cycle spaces are being added to the School grounds, with additional pupil scooter areas. Refer to the Transport Statement for the details of total cycle park provision.

- The School also has a sibling policy which is inherently 'sustainable' in terms of shared transport. The inability to take two full reception year classes is an issue for some

(particularly working) parents. If the School is only able to offer a younger sister a place in the first year then they may have to send them to a different school resulting in many years of less efficient travel to school.

Security

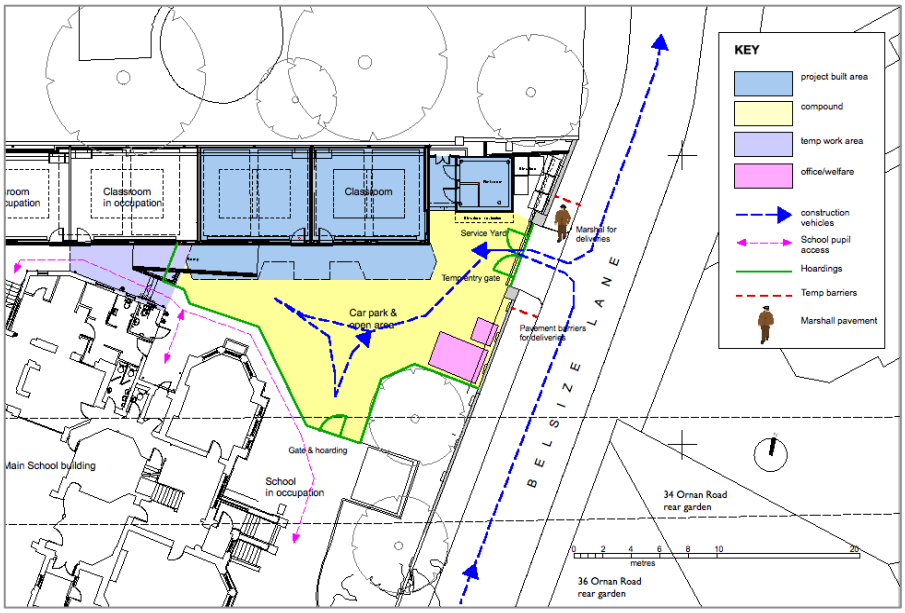
- The development will be designed to Secure by Design standards.
- The new glazed doors and windows of modern design will be suitable for the security of the property.

Party Wall

- A Party Wall award may be required with adjacent owners on the north side of the boundary wall with regard to the plantroom building extension.

Construction Management Plan

- The proposal site can be safely and readily segregated off from the rest of the School campus, with independent access off Belsize Lane.
- The School will issue a full set of "operational requirements" to the main contractor, in order not to disrupt educational operations and neighbour operations, which observe statutory noise and working restrictions on and adjacent to live construction sites.
- Working hours are typically to be as Camden informative for construction work which will be audible at the site boundary, restricted to the following hours:-
    - 8.00am - 6.00pm Monday to Friday
    - 8.00am - 1.00pm Saturday
    - Not at all on Sundays and Bank Holidays.
- No contractor is allowed to access School Premises without Authorization and issue of an appropriate security pass.
- The public highway will be regularly washed to keep clean. However the form of construction with lightweight elements, principally steel and timber, will not create much dust in this area.
- The School will remain in operation throughout the contract period with pupils, staff and visitors within the School.
- The Contractor is to ensure as part of the formal Site Induction process for all persons coming onto the site that they are aware of the standard of behaviour and code of conduct required from them while they are on site or near the School.



Construction Management Logistic plan

- The Contractor is also to ensure as part of the Site Induction process for all persons coming onto the site that they are fully aware of the standard of dress required from them as the Site is in a School environment with residential neighbours. In addition to the normal PPE all persons are to wear a Hi-Vis jacket or waistcoat.
- Camden Council place restrictions on all noisy activities that may be heard outside the site boundary, particularly during demolition activities, and the contractor must work in accordance with both the School and Local Authority requirements.
- All contractors appointed to carry out works must put in place appropriate arrangements to manage their works safely in accordance with HSE advice and CDM Regulations, and with due consideration to others that may be affected by their activities
- Vehicles for delivery and collection will be an appropriate size, timed to avoid peak School times, and will be instructed to approach from the south, and turn within the site, and exit the site heading north.
- Appropriate measures will be taken to minimise dust and keep the road clean, and noise will be carefully controlled so as not to disturb neighbours.
- It is not anticipated that craneage will be required as the extensions are small in scale.

Conclusions

- The new extensions and alterations will allow the School to expand two adjacent existing classrooms, with new toilets, so that they can be used for Reception Year.
- The conversion of the external car parking area will create a new playground for Reception Year, in an area that will be screened off from the street by a new service yard fence.
- The new proposals provide for access and inclusive design for all users, including wheelchair users, both to the proposed classroom and to the playground.
- The new proposals are of low energy and of sustainable design.
- The design, massing, siting and scale mean that there is no detrimental impact on the amenity of neighbours, with the building effectively below the level of the garden north boundary wall and fence in relation to its closest neighbours.
- The design makes good use of natural daylighting, will have a high performance for energy efficiency and is both sustainable and inclusive.
- Even though the building will not be visible from the public realm, the high standard of design proposed will create a positive benefit to the Conservation Area.
- The proposed works are in accordance with the development plan and offer fundamental benefits for the School, the local community and the Conservation Area within which the site sits.
- The proposal to increase pupil numbers from 235 to 260 pupils will not create further vehicle numbers and traffic, due to measures as demonstrated in the Transport Statement and Travel Plan.
- The School is recognised for its achievements and for the high standard of education and support that it provides for young children in the area, and this classroom project will help the School to continue to deliver the educational service for young children in the local Community.
- It is proposed that the scheme can therefore be recommended for approval.