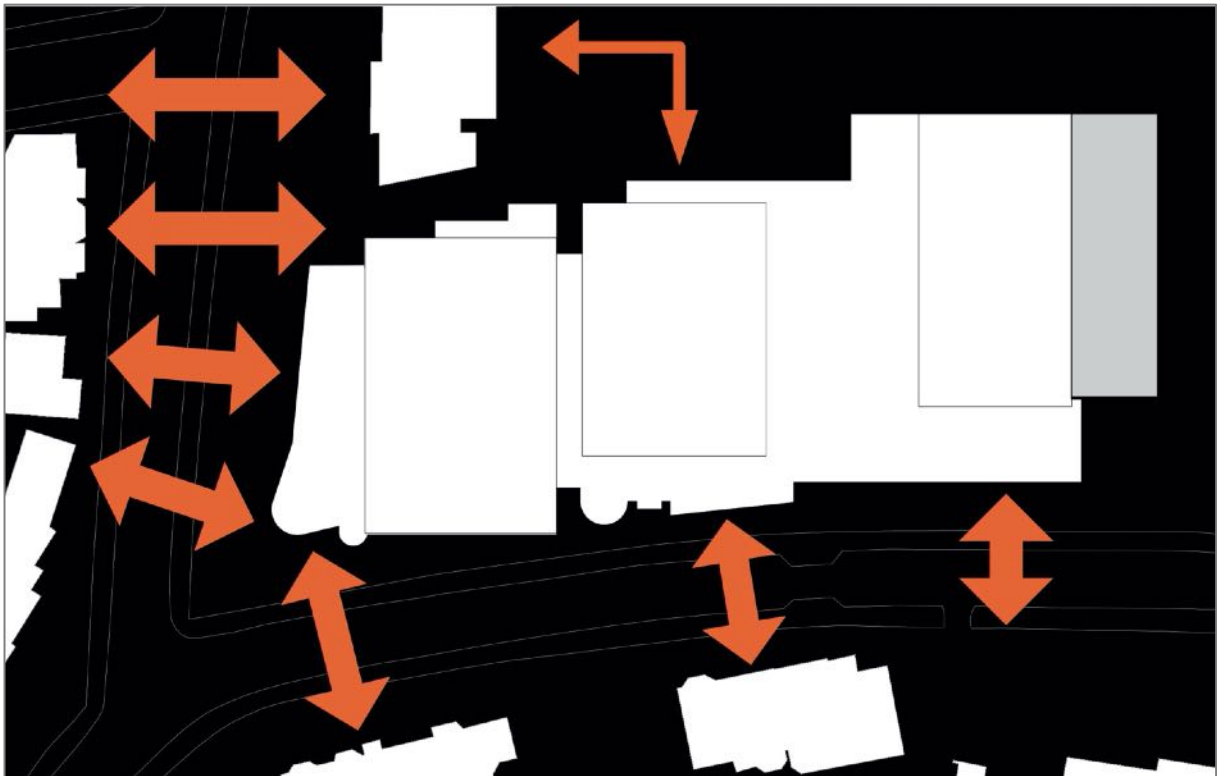
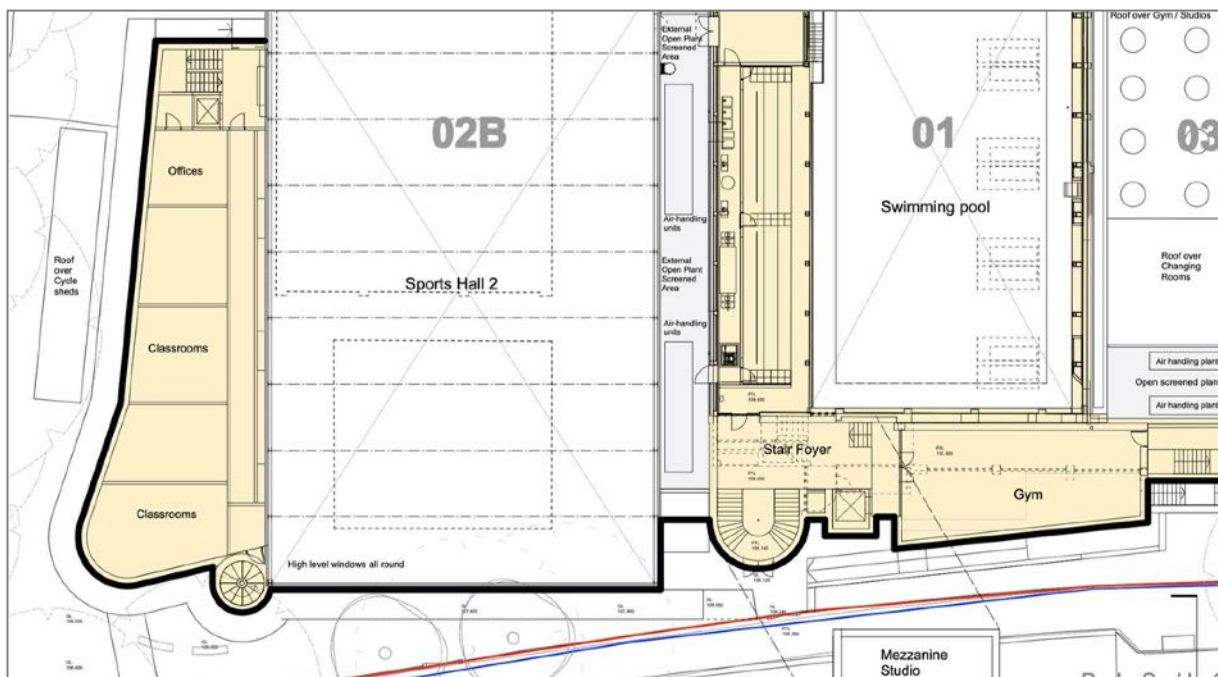




"Nolli" plan of the building form as a figure ground – with relationship to other buildings and spaces

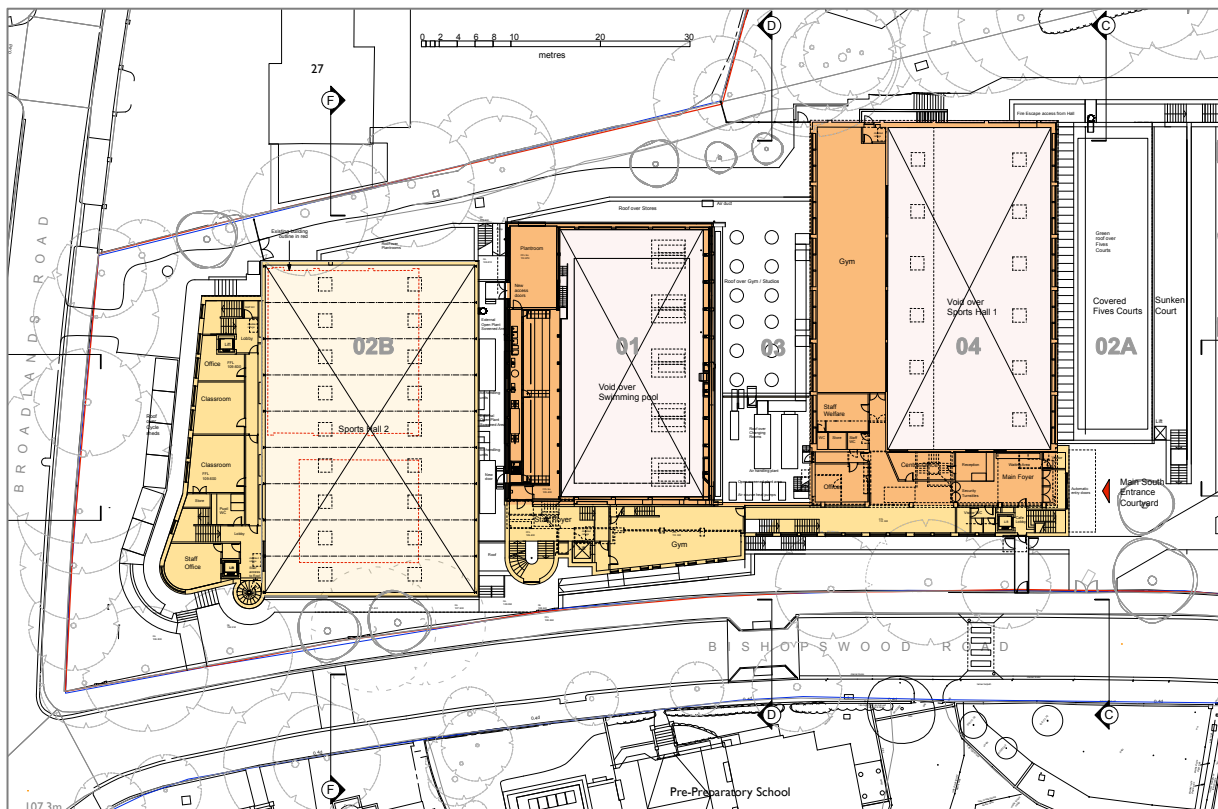
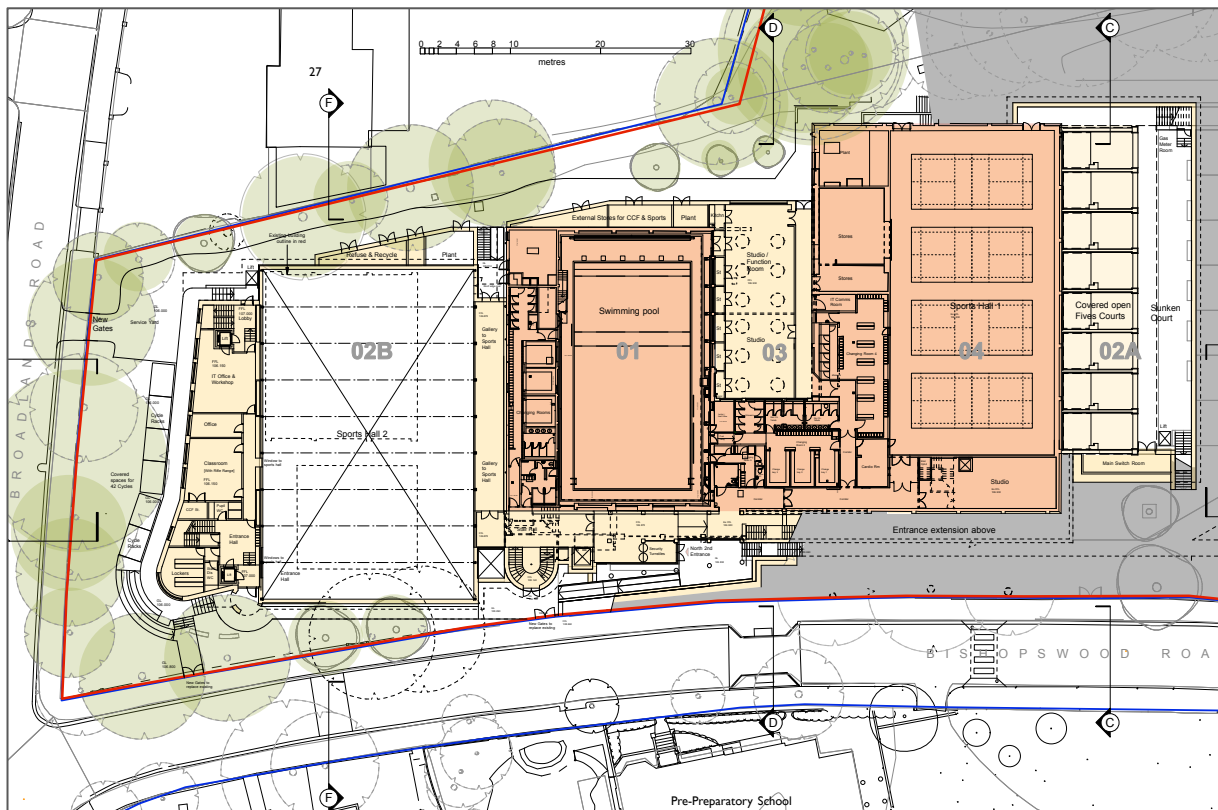
Curved organic and rounded elements play against the linear geometry – such as in the circulation spaces along the west side, the semi-circular stair towers, and in the teaching block on the north side.



The external perimeter wall highlighted as a rich and varied sequence of events that shape space around

From this has resulted the angled façade to the north face, which directly responds to the street line of Broadlands and creates a positive urban corner at the junction of Bishopswood Road and Broadlands Road.

This also allows more synergy and interaction with the landscaping proposals, creating a much more complex impression of the site seen from public streets around.



Ground floor and first floor plans with softer geometry of blocks - refer to project drawings for final details

The plan has developed from site analysis and reflects the topography and soft landscape in context. The composition of elements visually breaks down the scale of the sports centre and articulates its functions, while the facades are animated by the contrast of linear and organic forms, windows and entrances.

8.4 Elements of the Development and Layout

The main parts of the extensions can be analysed as a series of discrete elements, however it should be noted that they all form part of a single coordinated composition:

8.4.1 New Sports Hall:

The size of the hall in terms of plan shape, dimensions and height is determined by the aspiration of the School to provide a National standard netball court within the hall, one that will allow Premier league games to be played there. There is a national need for netball courts of this standard, for a sport that is increasing in popularity. Many other sports courts will fit within this same interior footprint, built to Sport England standards.

The hall is positioned with its long dimension on an east-west axis, aligned with the Pool hall, with the main north face on the approximate building line of front façade of No.27 Broadlands Road front façade to the east. There is not an established rigid building line along this road, however in townscape terms the alignment will be appreciated as maintaining the urban grain, allowing a significant setback of the principle building form, which is a characteristic of the local area.

Selected trees will be removed as part of this proposal as noted in the arboricultural report, as their root zones will be too heavily compromised by the new building footprint.



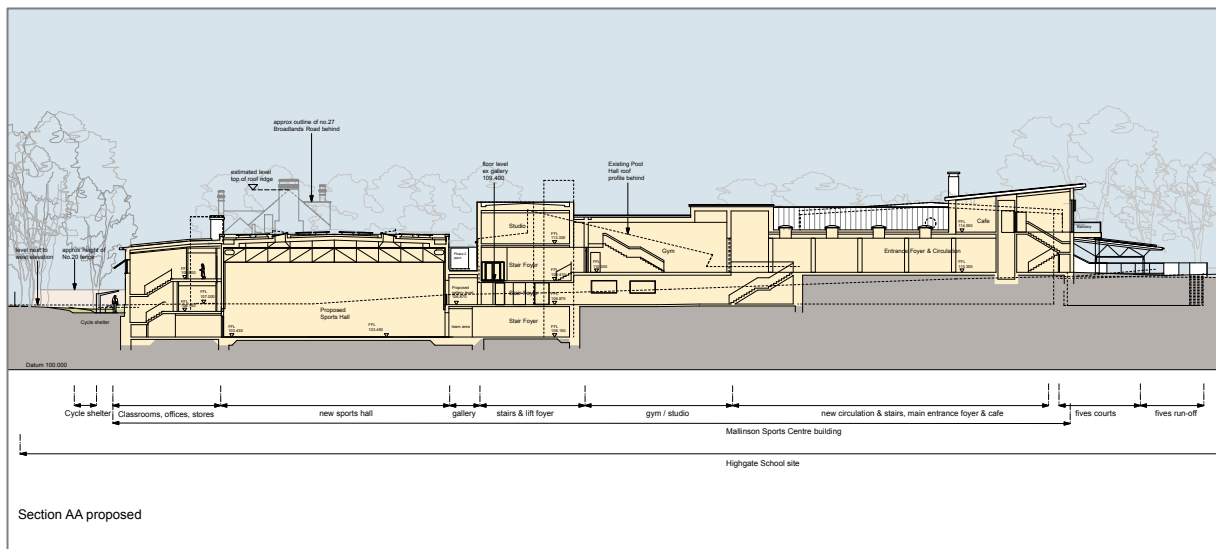
Design development bird's eye sketch aerial view from north-west - refer to project drawings for final details [perimeter trees and photo-voltaic panels on the roof omitted for clarity]

Much design study was carried out to find a location and orientation for the Hall that would preserve all the trees, but due to the extensive number and close spacing of mature trees around the site, there is no other position for the hall that can retain all the trees, so the strategy has been taken to minimise removal and to mitigate by planting a greater number of new native trees, that will in time more than supplement the loss. This is explained in more detail in the arboricultural section and the landscaping reports.

The status of the School as a long term historic owner of the site, and a good custodian of an estate with many mature trees, means that this is both feasible and reasonable to enable sound long term tree management while allowing the School buildings to be developed.

In order to keep the height and massing of the hall low to respect the existing context and neighbouring buildings, the floor level is lowered by a whole storey height, from 3 metres to 4.5 metres below ground [depending on where around the sloping ground levels the measurement is taken].

This effectively creates a large basement for the hall, that minimises the impact of the large volume visible above ground, making it effectively the equivalent of a two-storey building above ground. The Hall interior height itself is defined by National sports standards.



North-South section AA - refer to project drawings for final details

The section shows how the proposals step with the sloping ground to maintain a modest scale and volume, with the teaching block at the north end being lower than the adjacent residential house to the east, and Field House to the west.

The hall will generally be accessed from the south, via the new main stairs and lift adjacent. Fire exits are available from each of the 4 corners with stairs up to ground level. On the south side there is a balcony / gallery at ground floor, one level above basement, which will be used for spectators and for small scale indoor sports such as table tennis and fencing. The hall has storage rooms on the north and south sides at basement level.

Daylight to the sports hall will be largely from a regular grid of rooflights, which will allow generous natural light to filter down into the space. Internally the rooflights will be screened to prevent direct sunshine penetrating, which is not wanted for sports' activities. On the west side there is a high level clerestory

window for additional daylight, screened externally by vertical bris soleil. The other three sides do not have windows – on the east side there is the space and possibility but the logic is that high windows in this location would cause light pollution to the neighbouring residential property, as the hall is likely to be open into the evening for some sports and events. On the north and south sides there is adjacent development up to high level.

The hall has a flat [or very shallow pitch] roof construction with falls for drainage, with most of the area covered by a green roof planting system as described in the landscape architect design report, and photovoltaic panels, for ecological and sustainability benefits.

8.4.2 New north teaching block:

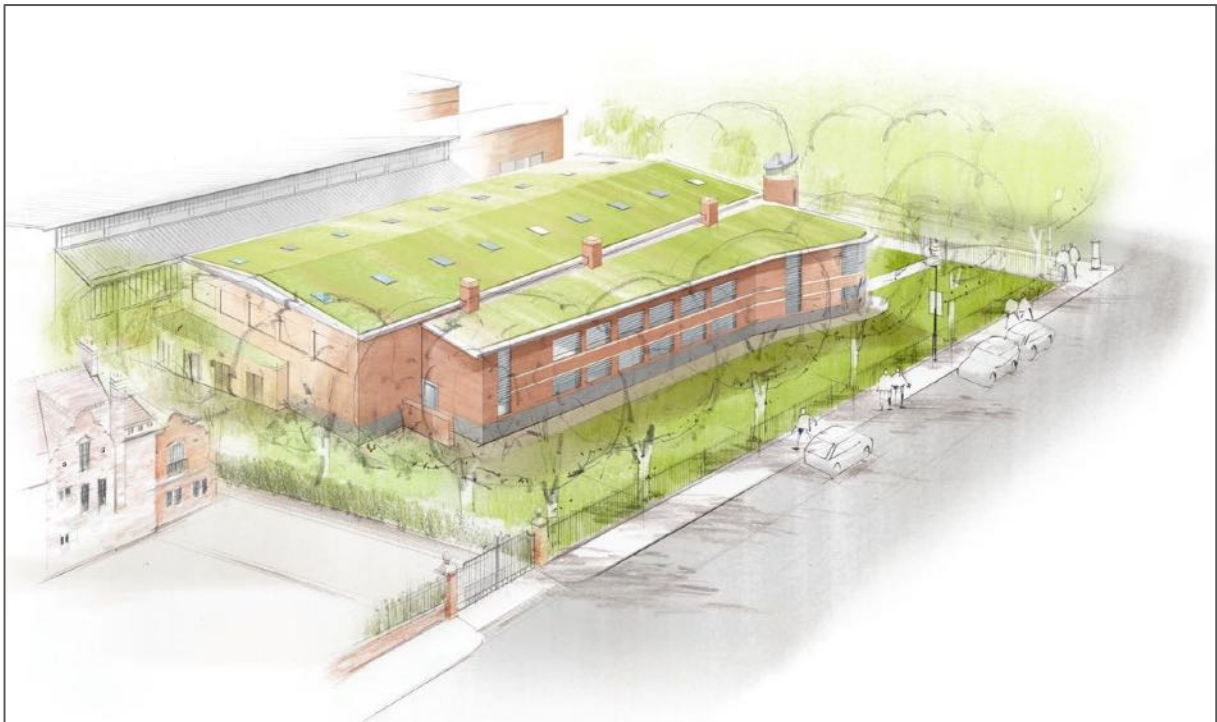
The teaching and offices block completes the composition of new extension elements on the north side. This block is two storeys in height above ground, with a further level at basement, level with the sports hall. At the western end the main stair is articulated as a corner tower, that becomes the architectural visual focus and hinge point at the junction of Broadlands Road and Bishopswood Road. Functionally this tower provides an access stair up to the roof.



Design development sketch view from north-west at road junction - refer to project drawings for final details [perimeter trees and photo-voltaic panels on the roof omitted for clarity]

This block brings a domestic scale to this side of the building as seen from Broadlands Road, in terms of its height, windows and detailing. There are teaching classrooms and offices at both the upper levels, while the basement level is for stores and plantroom. The general arrangement is for access stairs and lift at each end, with main entry at the west end.

The detailed flood risk report identified a real risk of flooding in the northern part of the site, which needed to be addressed [in addition to mitigation measures described elsewhere] by raising the floor levels of the northern block, so the ground floor at entrances is at approximately 1 metre above local ground to allow for temporary inundation, with the external walls tanked up to this floor.



Design development bird's eye sketch view from north-east - refer to project drawings for final details [perimeter trees and photo-voltaic panels on the roof omitted for clarity]

8.4.3 Western stairs, lift and circulation areas, with new side entrance Gym:

The circulation route follows on from the southern entrance and extends right along the western side of the building, adjacent to Bishopswood Road. The interior journey moving from south to north culminates in the stair and lift lobby, which offer integrated and inclusive accessible circulation to all levels, including down to the main sports hall and across to the viewing gallery. This area also connects in to the existing Pool hall gallery and changing rooms [which are currently not accessible for wheelchair users from the entrance levels].

The stairs and lift are expressed as formal adjacent inter-linked towers, finished in facing red clay brick, and connected [and in a sense separated] by glazed sections of window. Visually these two elements root the composition of forms at the key area of vertical circulation.

This section of the extension also has a secondary entrance to the sports hall for School users, when required [in its normal mode of operation, the MSC sports centre will always be accessed from the south entrance as a sole secure point of entry, under the supervision of reception]. The entry doors are accessed via a ramp down from ground level, then entering under the cover of building over through a colonnade. This gives greater flexibility of use.



Early sketch perspective view of west side on Bishopswood Road - [refer to project drawings for current elevation details]

The new Gym is at the level above the entrance. Internally the Gym provides a route through the building at first floor level, linking the Foyer and the new Stairs and lift, but the new main internal stairs also allow users to walk down to the level below and move under the Gym space. The Gym is meant to be seen as a specific element in its own right, in the composition of the full western extension.

8.4.4 South entrance and Foyer areas:

The extension along the western side of the building culminates in the new south main entrance. Compared to the existing entrance on the west side, which faces the street and has only a short external entry approach which quickly becomes congested, the new entrance will address the sports artificial grass pitches and the open expanse of the MOL, and open directly on to a new landscape designed entrance courtyard.

This part of the project has the entrance, reception and main Foyer at ground floor, and a new café above at first floor. The café has the option of a separate entrance directly off the street on the west side, without entering the School grounds. The entrance extension itself is two storeys in height above ground in order to command attention as the main access into the MSC sports centre, with the main front façade seen as a “portal”, a gateway into the building. At first floor there is a balcony accessed from the café which offers views out across to the playing pitches and across the MOL. This is all finished in matching red brick.

Along the western side, a series of equal glazed windows marks the progression along the interior to the main sports spaces, with the entrance building dropping down to single storey.

On this side, the existing Pool hall and Sports hall will only be seen as glimpses over the top of the new extensions, with grey cladding to emphasise recession.



Design development sketch perspective view of south elevation from Bishopswood Road - [refer to project drawings for current elevation and CGI details]

As the design developed, the relationship with the RMC proposed project on the south side of the MOL has been strengthened, so that there is an intriguing dialogue between the projects that binds them together and gives further consistency to the approach to bordering the MOL. Compared to earlier designs, the later proposed design has all-brick materials and more solidity to reinforce its continuity with the whole development and neighbouring Mills Centre, after discussions with Haringey planning and conservation officers.

8.4.5 South Fives Courts:

The extension along the southern face of the existing sports hall will be the new open covered Fives courts, replacing directly those demolished at the northern end of the site. The existing elevation is a blank masonry wall, which presents a scaleless and uninteresting façade to the MOL. The Fives Courts extension provides a much richer experience and will completely screen the existing blank wall, with the repetition of the dividing wall module creating a strong rhythm of masonry walls and open courts, and the lightweight steel structure above supporting a shallow pitched roof with a green roof planting system on it.

The Courts are sunken down into the ground, so that their floor level corresponds with the floor of the existing sports hall, in order to provide an effective viewing balcony at ground floor, looking down into the

courts. The handrails and balustrading are metal with glass panels, to lighten the impact and allow views through.

At the east and west ends of the courts, external stairs connect the level of the Courts back up to ground level with an external lift for inclusive access. At the east end a passage will link back to the existing sports hall. The extension will also create two new fire exit routes out of the existing hall, which will add flexibility to its use and improve safety.

The whole character of this extension will be open and lightweight, and filled with sports activity to animate the area at ground floor above. In the landscaping scheme this area becomes a planted viewing terrace with seating in bays, and a line of new trees, fully integrating the built form into the soft landscape around.

The existing sports hall will be retained in its current form, as it provides a valuable sports and flexible space resource. The roof will be re-clad with new coloured metal profiled roofing sheeting, and new rooflights introduced for improving natural daylight to the interior – the existing hall has no natural daylight. The works at roof level will enhance the weathering and thermal performance of the hall and extend the building life. The internal environment will also be improved by new mechanical ventilation, with rooftop ventilation cowls.

8.4.6 East courtyard extension:

The existing courtyard is a service yard space between the original pool building and the later sports hall building which no amenity value for the School as it is not readily accessible – along the southern side the existing spaces are for storage and plant.

In the planning application of 2015 [HGY/2015/1029] this was proposed for development with a two-storey extension, however in this proposal the intention is for a single storey structure, which will create a full courtyard infill and provide new studios spaces. At the eastern end the elevation will effectively close off the space between the original buildings.

The single storey extension will have little impact on the adjacent neighbour's garden, as it is well set back, and the low height means there will be no overlooking or effect on daylight or sunlight to the neighbour. This is a modest infill extension with only one visible elevation, and as this is facing the rear of the MSC sports centre, the design is for a simple and functional façade that ties together the existing east elevations. The roof is essentially flat with a number of rooflights to bring natural daylight into the interiors. Rooftop attenuated plant and services will be screened from view by polyester powder coated aluminium louvres.

8.4.7 The Orchard sports pitch:

The Orchard site is being enhanced as part of these proposals. The playing surface is being formed at an even level surface with good drainage, in the shape of an oval, with banked seating around for spectators.

The development of the design has arisen from the need for surface water flooding mitigation measures, in order to reduce the impact of future flooding on the main sewers. The lowered playing area will act as a flood basin for the occasional one in one hundred year heavy rainstorm event, reducing pressure on the

mains sewer in Broadlands Road, to the benefit of the MSC Sports Centre site and also of neighbouring residential properties.

The design and detail is described more fully in the Landscape Report which accompanies the planning application.



Sketch perspective aerial view of Orchard proposals - [refer to project drawings for current details]

The Orchard pitch will provide an exciting new sports facility linked to the MSC, further enriching the setting and relationship between internal and external sports.

8.5 Local Materials

High quality local materials are proposed which will assimilate with the existing new buildings such as Junior School. Natural red clay facing brickwork will be selected to blend in the context [the colour, shape and type to be selected]. There will be Portland stone dressings and parapets, with other parapets at high level being in ppc aluminium.

As noted earlier, the walls in clay facing brick will have special contrasting brick details to enhance the surface and provide visual interest – these details will be further developed to include textural and colour variation in the wall surface in key areas, by using contrasting colour bricks, slightly inset or projecting bricks, and bonding pattern. This will be a feature that refers back to the brickwork of surrounding Victorian villas.



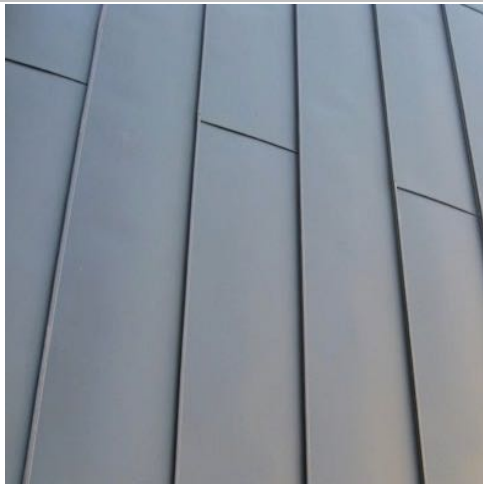
Example of brick detailing in the west elevation bays, with rotated bricks

The walls to the Fives Courts will be rendered to provide the required sports finish.

The existing metal windows are to be replaced with similar sections in terms of transom and frame widths, but will be selected to accommodate double or triple glazed window units for energy saving performance.

The areas of new large glazing areas will be in polyester powder coated aluminium curtain wall, with fine sections. The bris soleil to side elevations is intended to be a treated and stained hardwood or polyester powder coated aluminium.

Areas of flat roof will have a robust and long-lasting waterproofing finish such as built-up three layer reinforced, elastomeric bitumen torch applied sheet, in dark grey colour, combined with drainage membranes where used with green roof systems.

Walls dressings: Portland stone 	<i>Walls :</i> Red clay facing brick [to be selected] 
<i>New Windows :</i> PPC aluminium windows/curtain walling 	<i>Metal cladding & pitched roof :</i> Dark natural zinc 
<i>Green roof :</i> Green roof system to landscape design 	<i>Flat Roof:</i> Weatherproof system, dark grey 

8.6 Elevations and Appearance

The design development of the building elevations has followed a similar and related path to the building form, moving from functionality and coherence of composition towards a more expressive and responsive approach to the buildings in context.

Overall the new elevations will be varied in form, setbacks and heights of elements, but consistent in their general architectural language, composition and materials, as seen around the public south, west and north sides.

The combination of red clay facing brick and Portland Stone dressings not only provides a significant focal point for the development with high quality materials, but also refers back to the new Junior School, further south along Bishopswood Road, to the red brick Mills Centre, and to the future RMC building. However, the significant reference is also very much to the residential suburban context of existing Victorian villas.



4 Bishopswood Road exhibiting features in brickwork and stone dressings

The existing villas are faced in yellow gault and red clay brickwork, with elements of Bath stone and render for window heads, entry porches and coursing.

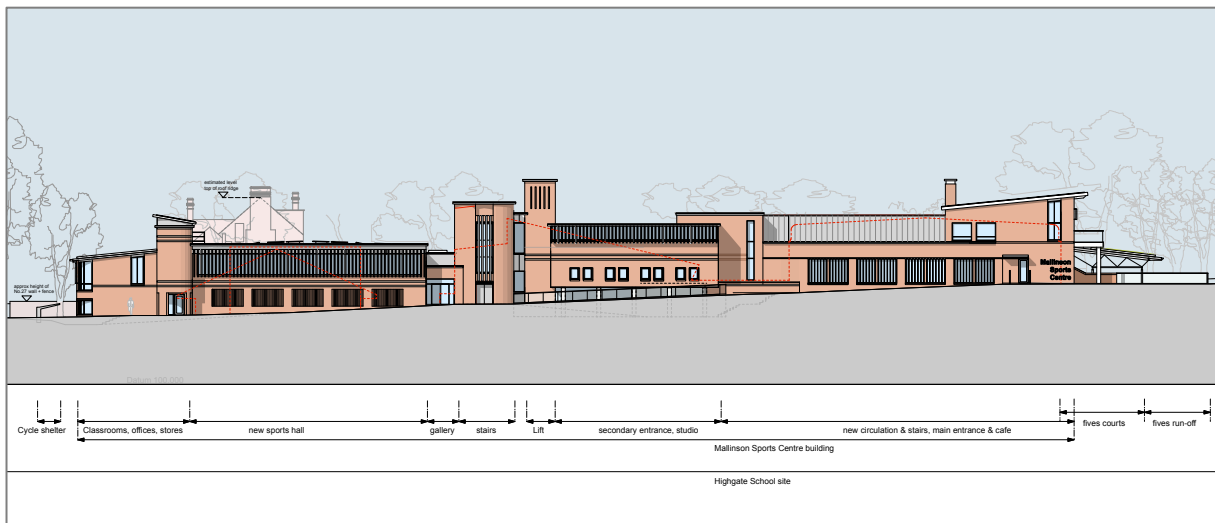
Their facades are enriched with decorative detail, such as the horizontal coursing bands, the toothed brickwork above arched windows, and the expression of corner 'rustication' by playing with the depth and recess of brick panels. The articulation is simple but effective.



Bishopswood Road from west, with yellow gault and red brick villas

The overall composition of the elevations uses local symmetries with subtle asymmetries, such as the bay windows and asymmetrical elevations with local symmetries of windows. The effect lends the facades a relaxed but formal and intimate quality. Within this context the initial design response for the MSC was aimed at consistency of material allied with an “English Free School” approach to composition by local symmetry, counter-balance and harmony of elements with contrast and differences. In consultations with Haringey planning officers, the theme of a richly articulated all-brick building, with precedents in architectural history such as by Dudok, St. John Wilson and Aalto, evolved into a very clear coherence.

With subtle adjustments to the plan described earlier, combined with more development of detail, the elevations allow the building to sit comfortably and complement its historic heritage context, while keeping the modern architectural composition and strong stylistic qualities of the design. All these elevations are seen in real life behind the filter of significant mature perimeter trees and landscaping.



Proposed west elevation to Bishopswood Road - refer to project drawings for final details

In the proposed design shown above, the verticality of key forms for the lift and stairs towers is reinforced, the pitch roof to the café at the south end provides a strong gesture towards the MOL and establishes a dynamic relationship with the proposed RMC project.



Proposed detail part of west elevation - refer to project drawings for final details

The wall of the sports hall has been articulated with a series of slightly recessed rectangular bays, in which the bricks are to be rotated to form vertical stacking recesses, as a special textural feature. This adds a rhythm of detail elements to the facade, and will be supplemented by planting at the wall base.

The off-white parapets and roof verges mirror the white painted timber elements in the villas, while the vertical bris soleil fins bring further rhythm while reducing light pollution to the street.

The composition balances the strong horizontals of repetitive windows which mark out the main sports hall and the entrance circulation route, with the strong verticals of 'towers' such as for the stairs and lift, which also mark out these significant organizational foci. On the south elevation the new two storey form signals the entrance and café above as the focal point of arrival to the MSC, with an open balcony overlooking the playing areas. To the right the regular rhythm of the Fives Courts completely changes the reception and appearance of the original sports hall, being more open, engaging and active.

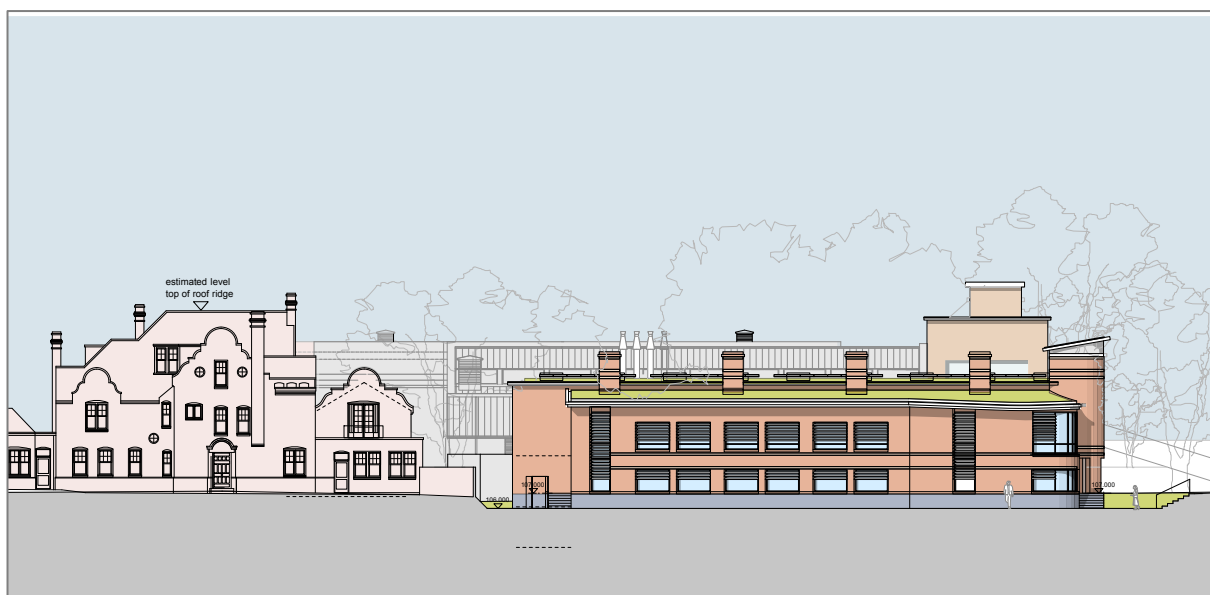


Proposed south elevation with main entrance on the left – refer to project drawings for final details



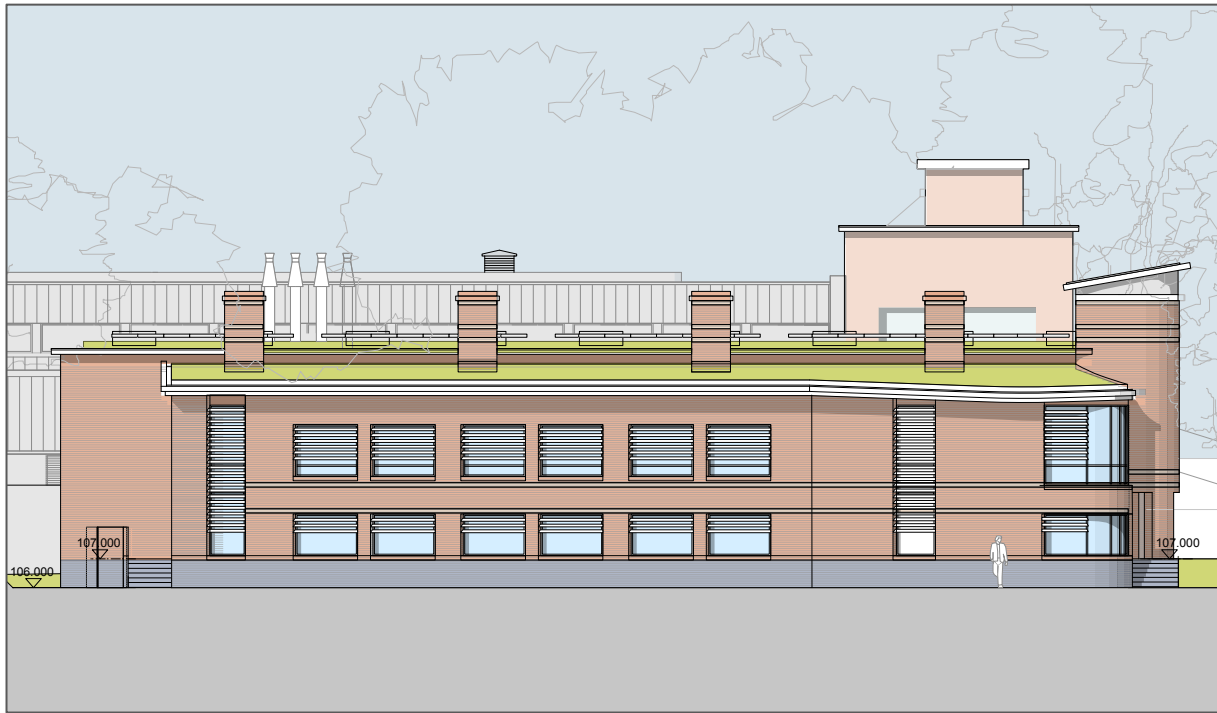
CGI perspective view of south elevation – refer to planning drawings for a larger illustration

The North elevation on Broadlands Road is seen in the context of the red brick Edwardian villas on the north and south side of the street. Here the elevation is articulating a teaching building, so the scale and pattern of windows is very much in keeping with the adjacent scale.



Proposed north elevation – refer to project drawings for final details

The general height is lower than the residential neighbour and the new extension sits comfortably with the residential context. For this block a plinth of approximately one metre high in blue engineering brick has been added at the base; this has a visual impact but is also valuable for the times when the lower ground area can flood [the flood mitigation proposals with this project still allow for 1:100 events when the rainwater level ponding could rise to circa 900mm above local ground level].



Proposed detail of north elevation – refer to project drawings for final details

The north elevation expresses the two staircases with vertical louvred windows, which provide stop-ends to the elevation composition, with a regular rhythm of paired windows between. The detailing of coloured bands and brick details is carried around from the west elevation, with a particular focus on the key curved corner. The chimneys are used for natural ventilation for the sports hall, but contextually they also bring resonance with context, being a prominent feature of all of the local Victorian and Edwardian villas.



CGI perspective view of north-west corner elevation at junction of Bishopswood Road and Broadlands Road above, and detail below – refer to planning drawings for a larger illustration

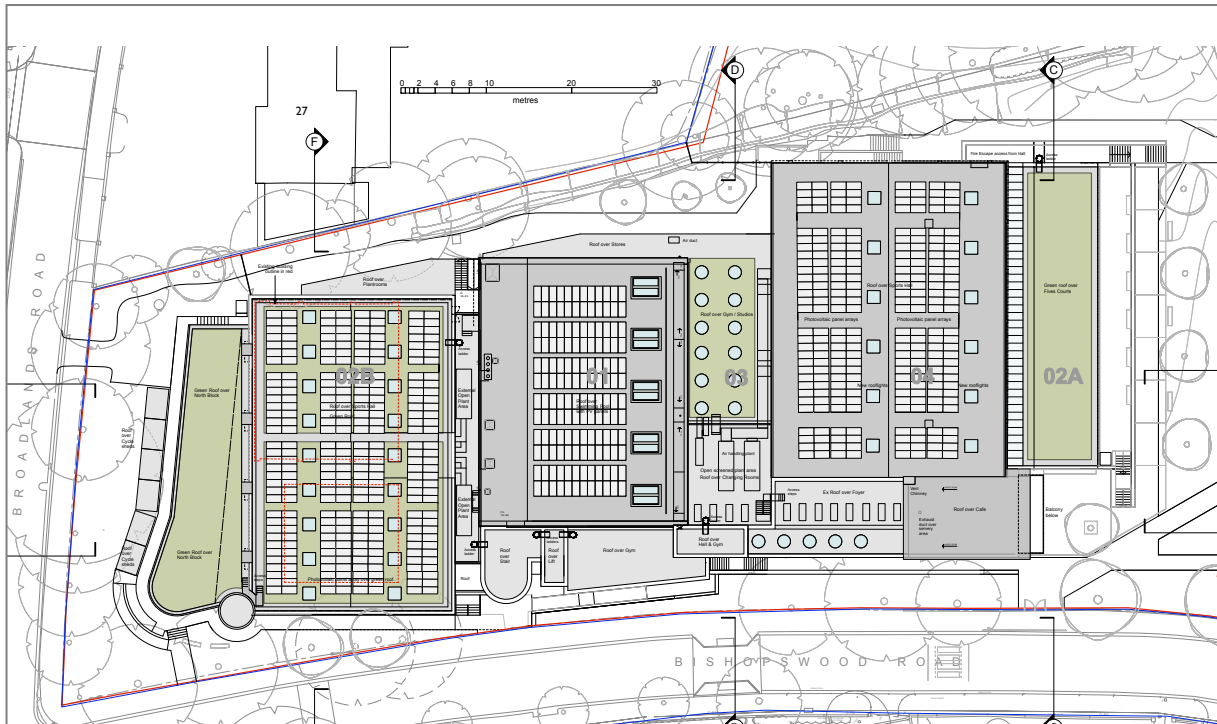
The CGI above shows the important corner junction of Bishopswood Road and Broadlands Road with the new proposals in context, looking up the sloping street towards the south end of the development.

The view below is a close-up detail of the architecture of the building at this key urban corner, with the composition of circular stair tower, curved corner with feature window, articulated brickwork and landscaping bringing a positive transformation to the street scene, as approached from three directions.



8.7 Rooftop and PV / Green Roofs

The rooftop is the “fifth elevation” of the project, and provides an opportunity for extensive array of photo voltaic panels and diverse sedum roofs.



Proposed roof plan [refer to project drawings for current elevation details]

The QRP Panel comments noted:

The panel welcomes the ambitions for roof-top PVs, but would like to understand how these will work with the proposed green roofs. It also would like to consideration given to ways in which the visual impact of roof-top PVs on the elevations can be mitigated.

The proposal is to combine PV panels with green roofs below, a synergy that can work very well with diverse sedum roofs. The sedum does provide a good habitat [albeit less than a wild meadow roof] and there are several species of sedum that can provide variety. In addition, the sedum planting cools the back of the PV panels and makes them more efficient. It is also feasible to maintain a sedum roof under the panels.

The Head Gardener at Highgate School, has commented that meadow flower planting at high roof level involves heavy equipment, frequent access for maintenance, and heavy loads of plant waste to be carried back down to ground, all of which can present safety issues.

Sedum is a lot more drought resistant and more tolerant of substrate than wildflower meadow, and therefore needs less watering and management. The flowering time is April to September (depending on local weather conditions) which is similar to wildflowers, so it is still useful for pollinators. Sedum will change appearance from year to year as it adapts to local weather conditions and management styles, which adds visual interest.

8.8 Landscaping and Trees

The external spaces are the subject of a full hard and soft landscaping and planting design, prepared by Robert Myers Landscape Architects. A separate set of drawings accompanies the planning application and includes the new north entrance courtyard and connecting paths beyond to the artificial pitches, as well as the Orchard sports area design. The aim is to create well-planned and enjoyable planting around the boundaries of the site, where permissible under the mature trees, to enhance the experience of the view from the public street and provide a green landscaped counter-point to the building forms. Where trees have been taken down out of necessity, replacement trees are proposed in greater numbers.

A separate Landscape Report outlines the design and philosophy of the planting and tree replacement.



Proposed landscape design— refer to Landscape Architect drawings

The aim of the project design from the outset has been to avoid tree loss if possible by the careful siting of the building extensions and structures. In the final design some trees will be lost as the root zones extend so far into the available site, but the number has been minimised and includes trees that are in poor condition. The new landscape design includes for a significant increase in tree numbers by the provision of new native trees. On the Orchard site the situation is different, as the design includes for maintenance of an existing woodland area, which contains many self-seeded trees and others in poor condition, so tree removal is as about good woodland management.

A separate Arboricultural Impact Assessment by an independent arboriculturalist accompanies this planning application, with guidance on the protection of retained trees during construction.

8.9 Ecology and Biodiversity

There is an overall positive impact on ecology and landscape as a result of this project. The proposals incorporate a full landscaping design to all areas around the building, including boundary treatment, to enhance the planned planting areas and biodiversity – refer to the landscaping design drawings. The provision of very extensive areas of green roof systems on some of the new extensions, including the roof area of the new sports hall, will encourage new ecosystems. The management of the woodland area next to the Orchard basin can bring significant benefits to biodiversity.

Numerous mature and semi-mature trees of sufficient age and size to support suitable bat roost features are present at the site. Due to the proposed loss of some existing trees [refer to Arboricultural Report] directly around the MSC buildings, of which one is in poor condition with no canopy currently, a full assessment of their bat roost potential has been carried out. An urban greening factor plan has been presented in the Landsscape Report which shows the positive benefits of the proposals.



Urban Greening Factor plan– refer to Landscape Architect drawings

No impacts on statutory or non-statutory wildlife sites are anticipated as a consequence of the proposed development given the distance between the designated sites and the site, and the scale and type of development being proposed.

An Ecology Report of the site by ecology consultants accompanies the planning application.

9.0 Accessibility and Inclusivity

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9.1 Accessibility

The MSC sports centre building after alterations and extensions will be fully wheelchair accessible and Part M compliant [whereas the current situation is that there is accessibility to both main floors via external entrances, but no internal lift].

The main entrance currently has a ramp from street level up to the foyer. Once inside the building from this point there is no lift or ambulant disabled stairs that can provide inclusive access to the ground floor.

The new proposals will provide a new disabled Part M compliant lift and a much more generous main stair suitable for ambulant disabled. This will significantly improve access within the building to all areas and levels. Additional disabled lifts will be provided within the north block, which has different floor levels, and an external lift to access the Fives Court level.

Internal floor levels will be consistent throughout all areas for level access. Paths around the building will be graded to ensure that the approach is Part M compliant. Stair will be designed in accordance with Part M regulations for visual and tactile contrast at threshold areas to steps, with visually contrasting safety nosings.

The north block will have lift access at both east and west entrance for inclusive access to all floors and will also interconnect with the main sports hall.

Bathroom provision will provide for disabled toilets, both for users and for staff.

The approach into the building will be improved by the level access from the south courtyard with automatic opening entrance doors. Suitable facilities for the deaf will be provided at the new main entrance reception. All new doors will accommodate a regulation clear wall space on the lever side in compliance with Part M, and will conform to current Part M standards in terms of clear width, direction of opening, and contrast of fittings. Fire doors will be fitted with self-closing devices. Wall colours will assist visually impaired in finding good contrast to make spaces more easily legible.

9.2 Traffic, Transport and Cycling

There will be no impact on traffic as a result of these proposals, as there is no increase in pupil numbers. The new additional interior sports spaces will allow for a wider range of sports to be played, and relieve current problems with implementing the educational sports curriculum.

There is no on site car parking existing or proposed, but the plans include for a new service area accessed off a new access on Broadlands Road in the north-east corner of the site.

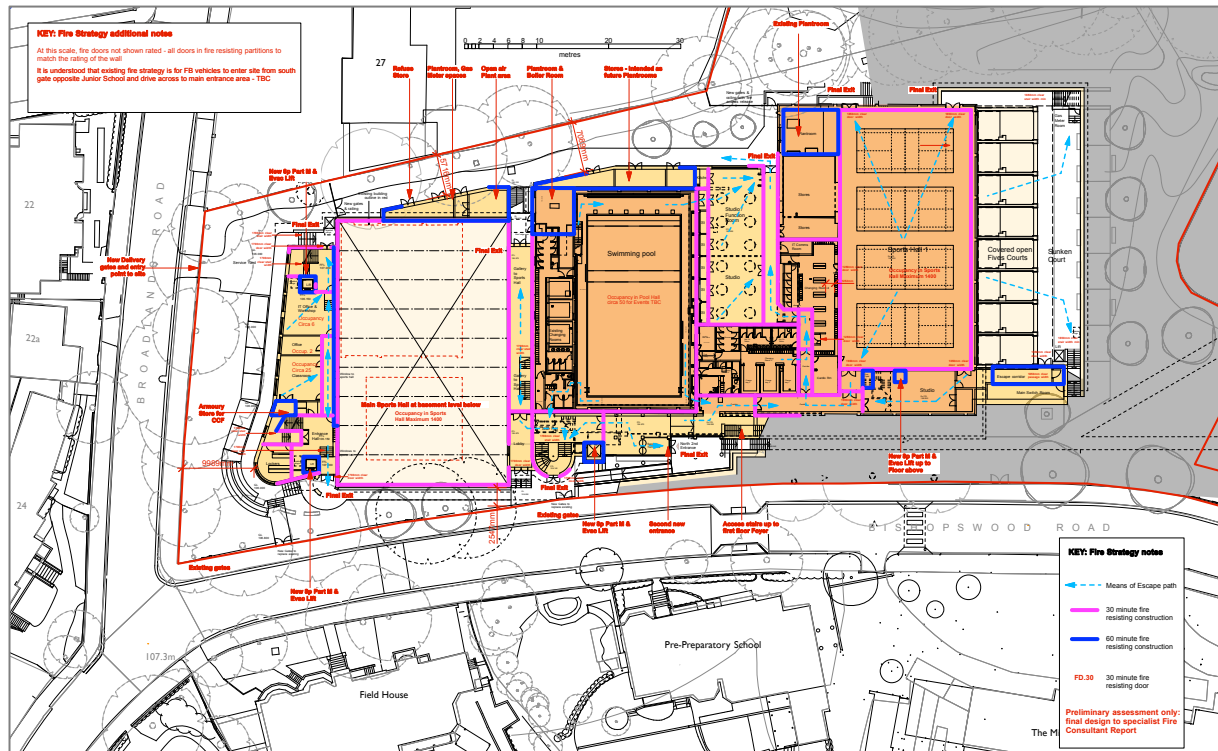
New covered cycle parking is to be provided at the north end of the site, with 42 covered spaces. In addition, there will be 8 non-covered cycle stands adjacent to the main entrance for the convenience of users and visitors – in this location it is considered that cycle shelters will detract from the appearance and character of the MOL.

A separate Transport, Green Travel and Traffic Report accompanies the planning application.

9.3 Fire Strategy

A fire safety assessment of the proposals has been carried out by an independent qualified fire consultant. A Fire Safety Statement is included as a separate document in the planning application, which demonstrates compliance with the Building Regulations and the London Plan 2021.

Fire Brigade access is available from the north and south of the site off-street, as well as along the frontage to Bishopswood Road.



Proposed architectural fire strategy- refer to Fire Safety Statement for all details

9.4 Refuse Collection

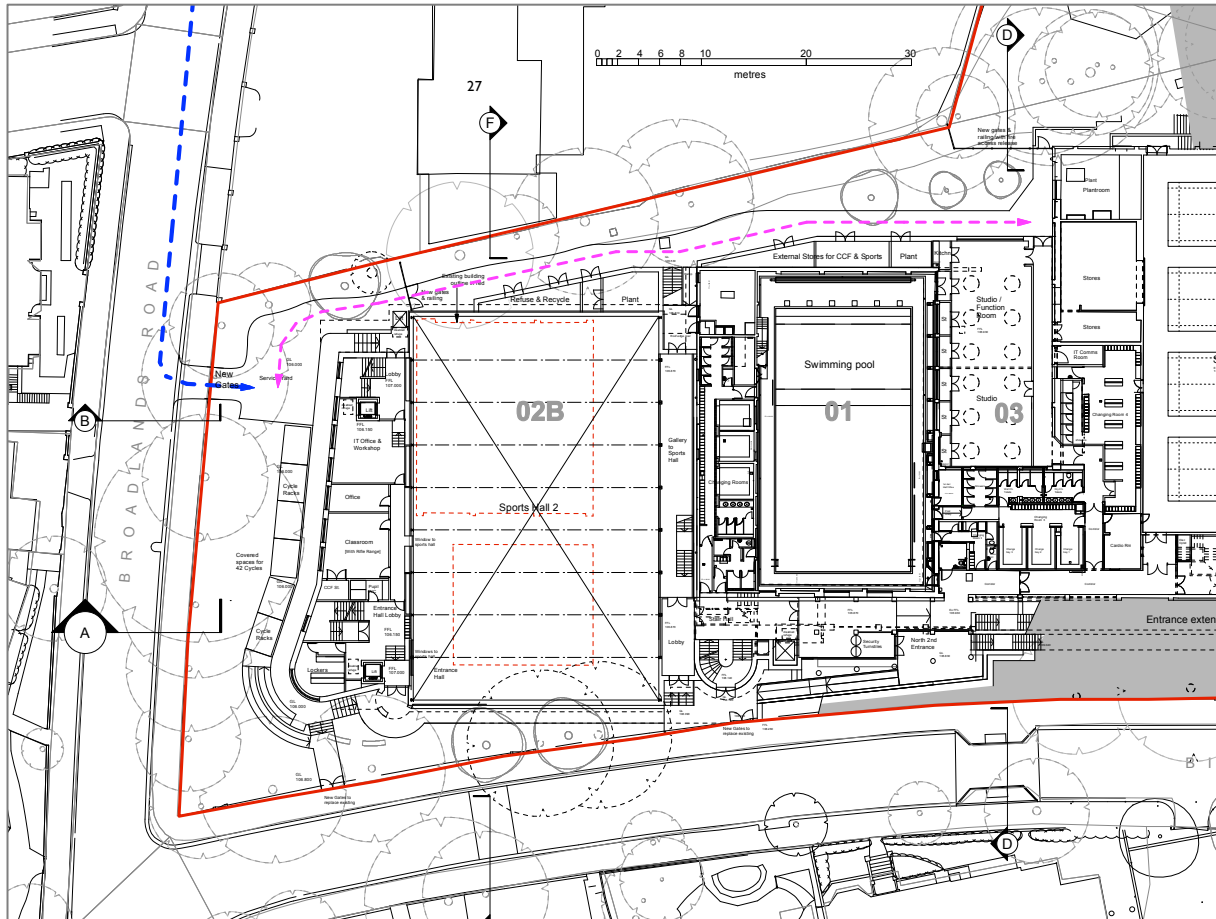
A new access gate with will be formed off Broadlands Road in order to provide service access direct to the plant areas on the east side, and to make deliveries to the sports hall for events.

This access will be used for all “back-of-house” servicing of the building.

A dedicated new Bin and Recycle Store is provided in the plans on the east side near to the new service entrance, with space for separating recycling and standard waste. Adjacent to the Mills Centre on the other side of Bishopswood Road there is another Bin Store available for use.

The School has a waste management regime and sustainability policy document for their whole estate, which is always under review and improvement. The policy has organizational targets to achieve year on year increases in recycling as proportion of waste, continuous year-on-year reductions in waste arising per FTE staff and students, and a reduction in printer paper consumption per pupil/staff headcount year on year.

The School has a contract with a private company for waste collection from all their bin storage locations on a regular basis. Waste from offices and classrooms is separated at source into Dry Mixed Recyclables (DMR) and General Waste (GW). DMR are collected via green bins. The School's cleaning contractor collects the content from the green bins. These are emptied into 6*DMR 1100L paladins at Mills Centre. General Waste is collected into bins throughout the school, collected by the contractor and these are taken to the bin store by the Pre-Prep school. The bin store being added with the MSC development will provide an additional storage and collection point.



Access for service vehicles off Broadlands Road is shown in blue dotted line – service access within the site by small electric cart along the eastern service path is shown in pink dotted line.

General waste is then collected under by Haringey contracted out to Veolia. The School has limited visibility of the waste stream once it leaves the school but Haringey waste is generally sent to NLWA at Edmonton for further sorting, for “energy from waste”, or to Landfill.

Dry Mixed Recyclables are collected by Veolia and then taken for treatment and sorting by them. The School is establishing the way that DMR is treated and disposed of by Veolia in order to improve knowledge of downstream destination of waste to identify whether the School can amend relationship with waste contractors for further improvements.

A separate Waste and Servicing Report accompanies the planning application.

10.0 Sustainability

10.1 BREEAM

A BREEAM pre-assessment is included as a separate document in the planning application. The target proposed will be Excellent, with a minimum target to achieve Very Good.

10.2 Sustainability in Design

Walls and roof to the new extensions will be heavily insulated at least to current Building Regulations standards. Energy loss in heat will also be minimised by careful detailing of the fabric and junctions to provide good airtight seal and minimise cold-bridges.

A number of sustainability measures have been adopted in the design including:

- Provision of green roofs, which will assist in the attenuation of rainwater, provide natural habitat, and provide a pleasing finish for neighbours overlooking.
- Where possible spaces will be naturally ventilated by opening windows and rooflights.
- Generous new windows and rooflights will provide good daylight and reduce dependency on artificial lighting to the principal spaces including the sports hall, studios and teaching classrooms.
- Low energy fittings will be used throughout the interiors.
- Electricity will be metered and monitored to test performance in use.
- Materials for the new building are to be selected from sustainable sources.
- Timber to be used in the construction will be required to be from managed forests.

The new extensions will be using all-electric power source to minimise carbon emissions and a screened rooftop plant area location has been identified where Air Source Heat Pumps can be positioned with good access for maintenance, on an existing flat roof.

The existing Pool Hall plantroom does use gas heating boilers which were recently refurbished in 2020. The intention is to retain this in a transition period rather than waste the resource, however additional plantroom space is being provided in the new development to switch over to electric power source when these boilers come to the end of their useful service life.

A separate Energy Statement and Sustainability Report are submitted with this application, as well as a Pre-Demolition and Re-development Audit and Whole Life Carbon Report.

For the new extensions, Circular Economy measures and construction layering will be carefully considered in the detailed design, so that these parts can be de-constructed at the end of building life, with materials, resources and elements being re-used and retaining their value.

10.3 Building Services

The concealed flat roof area between the new sports hall and the existing Pool Hall has been identified for locating the majority of the new plant. There will be a screen at each end that will conceal from view.

This will serve both new extension areas, including the new sports hall, and also internal areas of the existing building where mechanical ventilation has been found to be substandard and requiring extensive modernisation.

There will be separate systems for the studios on the west elevation, with plant again concealed, and for the north block, where most of the plant will be contained within a basement plantroom and east side plantroom at ground level.

All air handling or other noise generating plant will be acoustically controlled by attenuators to comply with Haringey regulations for noise at the boundary. A separate report for a Noise Impact Assessment accompanies the planning application.

New connections will be made to existing services on the School site.

An Energy Statement accompanies the planning application. This will also involve an analysis of the possible beneficial use of renewable technologies, conservation of resources, efficient water systems and plumbing, rainwater harvesting and other measures.

A new solar panel array will be fixed to the roof of the existing pool hall to benefit from solar energy, and further photovoltaic arrays are proposed to be fitted to the new and existing sports hall roofs.

10.4 Urban Drainage and Attenuation

The project will contain only a small number of additional new toilets for staff and pupils as the centre is already well provided for; new foul drainage connections will be made into the local sewer system, as shown on the planning drawings. The existing changing rooms and showers are all to be retained.

To serve new Highgate School Development new drainage will need to be constructed. New drainage will meet the requirement of The London Plan and Haringey Council for sustainability and best practice design. Sustainable Urban Drainage Systems in the form of permeable pavements, swales, bioretention systems will be carefully selected and implemented whenever possible.

Peak flow-rate into the sewer will be significantly reduced by implementing flow controls and attenuation SuDS: the flow-rate will be restricted to greenfield rate and volume, significantly minimising the impact on existing infrastructure and reducing risk of flooding downstream of the development.

11.0 Technical Characteristics

11.0 Technical Characteristics

11.1 Amount

The calculations allow for the demolition of some existing buildings and parts of building, with the retention of other existing buildings.

1. Existing Buildings:

The existing GIA internal area of the MSC Sports Centre is as follows:

○	Ground floor	GIA	=	2013 m ²
○	First floor	GIA	=	557 m ²
○	Total MSC Sports Centre	GIA	=	2570 m ²

The existing GIA internal area of the Fives Court building is as follows:

○	Ground floor [Level 2]	GIA	=	292 m ²
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The existing GIA internal area of the Squash building is as follows:

○	Ground floor [Level 2]	GIA	=	135 m ²
○	First floor [Level 3]	GIA	=	17 m ²

The existing GIA internal area of ALL existing buildings is as follows:

○	Total All buildings & floors GIA		=	3014 m²
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2. Demolitions:

The areas of buildings for demolition are as follows:

○	Fives Court	=	292 m ²
○	Squash building	=	152 m ²
○	Ground floor corridor and entrance part of Pool building	=	76 m ²
○	Total demolitions		= 520 m²

3. Existing retained and proposed new development:

The proposed GIA internal areas of the overall project [existing retained + proposed] are as follows:

○	Basement	GIA	=	1303 m ²
○	Ground	GIA	=	3168 m ²
○	First	GIA	=	1210 m ²
	[includes external covered Fives Courts under roof]			
○	Second	GIA	=	192 m ²
○				
○	Total GIA All Building Proposed		=	5873 m²

4. Proposed new development only:

The proposed GIA internal area of the new extensions only are as follows:

○	Basement	GIA	=	1303 m ²
○	Ground	GIA	=	1199 m ²
○	First	GIA	=	572 m ²
	[includes external covered Fives Courts under roof]			
○	Second	GIA	=	192 m ²
○				
○	Total GIA All Building Proposed		=	3266 m²

Summary GIA area increase:

Increase in GIA area overall proposed:

○	Total GIA Area increase	=	2859 m²
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The area within the Red Line for planning site, which includes the area of the MSC main development, and of the Orchard and part woodland :

○	Total Area	=	13,745 m²
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11.2 Crime Prevention

The development will be designed to “Secure by Design” standards. The new windows, doors, external glazed screens and building security services will improve the physical security of the existing building, while new extensions will be constructed to the highest modern standards.

The intention will be for access into the MSC sports centre to be controlled at a single point of entry, at the south-west entrance hall, where movement can be visually monitored by the reception. Access into the pupil / sports areas will be via turnstiles or similar controlled gates. Other points of access into the building will be secured by access control systems with key, code or card operated entry.

A CCTV system will cover the entirety of the building external perimeter, monitored from reception or management office. The site as a whole is part of an area that is already bounded by railings. These may need to be taken down temporarily in places for the construction process, but at completion will be restored into position. The security of the buildings and site has been reviewed in consultation with the Metropolitan Police.

A separate Secure by Design Statement for this project is issued as part of the planning application.

11.2 Archaeology

A desktop Archaeological Report has been prepared for this site as part of a wider study for the School land on the east side of Bishopswood Road, and this accompanies the planning application.

The report has concluded as follows [extract]:

- *Given the lack of historic development across the site prior to the later-19th century and the subsequent level of landscaping and ground disturbance this later development required it is not deemed likely that any archaeologically significant deposits will be affected.*

11.3 Amenity

There will be a positive effect on the amenity of neighbours due to the enhanced quality of the design and materials, and the enhanced landscaping of all the external areas.

On the south and west sides the buildings have no immediate residential neighbours. On the north side on Broadlands Road the new proposed building will be across the road from buildings that are currently in School use, and the residential building of 'Gwendolen Sim'.

On the eastern side, where the new extension is nearer to the boundary and neighbouring house at No.27 Broadlands Road than the existing Fives Court building, the new hall is effectively two storey above ground, and not higher than the Fives Court ridge point or the neighbouring extension roof ridge, which was developed up to the boundary. The neighbour's extension has a blank brick wall on the boundary, with rooflights to the pitched roof that will not be affected. There are not considered to be daylight or sunlight issues regarding the habitable rooms in the neighbouring property as a result of this proposal. The removal of the tree on this boundary will also provide daylight benefit to the neighbour.

A separate report by an independent Rights of Light Specialist is included with this application.

Regarding overlooking or artificial light spillage, the new sports hall will have high level glazing on the west side only, all other natural daylight being by rooflights.

In terms of outlook from No.27 Broadlands Road, the proposals will improve the outlook, currently of a huge glass roof to Fives Courts and ill-planned ad-hoc external works of tarmac and paving amongst the green grass. In the new proposals the outlook will be towards the new well-designed and landscaped external spaces around the building. The general enhancement of the site and buildings will give an uplift to the whole local area on Broadlands Road.

For the Orchard site, the new sports pitch playing surface will be at a lower level in a basin, which may reduce the impact of sports games on neighbours, visually and acoustically.

Regarding noise, the proposals remove the external Fives Courts and outdoor games area, while all the new spaces are for indoor sports, so ambient noise from pupils playing will probably be reduced.

There will be new plant for providing assisted mechanical ventilation to the sports hall, necessary because the hall is sunken into the ground as a basement, and this will include external air-handling units located on the roof space between the sports hall and the existing swimming pool block. In addition, new air-source heat pumps are to be installed, in the sustainable interests of moving away from gas powered heating to electric, and these are located on an existing roof area, screened from view.

External plant will be very carefully designed with sound attenuation, all in full compliance with the Haringey noise emission standards. A separate independent Noise Impact Assessment is included as part of the application.

11.4 Structure

The ground conditions consist mostly of clay substrates, as indicated by the site investigation by Soil Consultants. There are no known soil contaminants on or near the site as indicated by the Soil Consultants report.

The below ground levels will be surrounded by embedded CFA contiguous piled walls topped off with a reinforced concrete capping beam. This provides a root barrier around the site & support for the soil during excavation as well as in the permanent condition. Thickening of the slab will be required below the columns on the side closest to the existing building to form a ground bearing foundation.

The embedded CFA contiguous piled walls reduce the amount of excavation required for the basement levels and can be built close up to the existing buildings, maximising floor area.

The thickening for the columns removes the need for piles at this location.

The new extension structures are likely to be of steel frame construction with reinforced concrete or steel and timber floors. Roof beams may be in steel truss or timber glulam beam construction.

The existing buildings have been visually inspected by the structural engineer: the façades appear to be in serviceable condition, with some areas requiring re-pointing, and internally only small cracks have been found requiring repair.

11.5 Construction Management Plan

An outline Construction Management Plan report is included with the planning application as a separate document.

The Construction Management Plan is a design stage document. When the Main Contractor is appointed they will be required to adopt the main measures particularly with regard to School requirements and safety, but will be responsible for updating and amending the CMP to meet their own construction methodology, method statements and plan of work, health and safety coordination according to the CDM 2015 regulations, proposed working arrangements and agreed programme. Further logistical information can then be supplied to the Council as required.

It is the intention for the development to be carried out in 3-4 phases, starting with the Fives Courts at the southern end of the site, then the second sports hall with the north teaching block, and west studios, gym and circulation areas.

The site will have solid hoardings, to the high standard that has been adopted for all recent major Highgate School projects, to maintain a good appearance particularly to the public realm. The hoardings will make the site secure and separate from the street, the School sports and landscaped areas.

Hoardings internally will also separate the site from areas in School use. The aim will be to keep the MSC sports centre functioning, albeit at times at reduced capacity and functionality, throughout the construction period.

Site management, storage and welfare cabins may be positioned on the site.

Tree protection will be provided in accordance with the Arboricultural Report prepared as part of the planning submission.

Working hours are typically to be as Haringey 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

and not at all on Sundays and Bank Holidays.

Early approaches to the Local Authority will explore what medium term parking restrictions might be implemented to improve vehicle movements and the safety of pupils and road users.

There may be a need for cranes in these works. However, it may be possible to design the construction elements as modular to reduce the component size for lifting and minimise crane use.

The location of site cabins and welfare will be determined by the Contractor in accordance with their working methodology and CDM Regulations 2015.

Calculations on vehicle and skip numbers, and all other necessary detail for the Council, will be provided by the Contractor after appointment.

The programme period is based on the current design and will be subject to fluctuation. There will be works that can be approached with more vigour during periods of school closures and the final programme should take benefit of those occasions as far as possible. Care should be taken however not to rely too heavily on holidays, as long delays can accrue if time slots are missed.

12.0 Summary and Conclusions

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12.1 Summary and Conclusions

The new and improved sports and ancillary facilities proposed in this submission are urgently needed by Highgate School. The plans will address the need for more sports educational teaching spaces of a varied nature for girls and boys, and help to raise the standards and enthusiasm for sport. The facilities are now, and will continue to be, available for public use.

The proposals put forward represent a carefully considered, contextual and sustainable project for the alteration, refurbishment and extension of the MSC sports centre. After initial design explorations for the site, including complete demolition and new build, the School has resolved to retain existing buildings that are in good basic structural condition and have value, and incorporate them into the long term future of the facility in a way that re-uses good resources and minimises waste. This has already started with the refurbishment of the swimming pool and changing room building, which has been completed to a high standard.

The public has been widely consulted by means of public exhibitions, with a website set up to receive comments, and these have been taken on board as the design has developed.

In 2021 the School entered into a Planning Performance Agreement with Haringey which resulted in a series of detailed consultation workshops, both design and technical, with key planning and conservation officers. In addition there has been a formal Haringey Quality Review Panel by independent consultants on design and sustainability issues.

The QRP Panel reported that *“the strategic approach that the design team has adopted promises to deliver a successful facility that offers much to the school and wider community”* and also *“The approach taken to the southern elevation, incorporating the five courts, successfully enhances what is currently a bland façade, and the panel feels that this justifies the minor encroachment onto Metropolitan Open Land”*.

The evolving design has responded to the comments and contributions in a positive way, and the proposals have improved as a result. The new and existing proposals will sit comfortably and complement the heritage context with a clear cohesion of architectural composition and refined elevations.

The existing buildings constitute a negative impact on the Conservation Area so it is important that the character and appearance of the sports centre is radically changed. In response to this the new extensions wrap completely around all three publicly viewed sides of the existing buildings, screening the original buildings and providing effectively a new modern integrated and contextual appearance which will significantly benefit the locality and enhance the character of the Conservation Area.

The new extensions have a variation in forms that belie the size of development, and basement excavations will further mask the scale of the large space of the new sports hall. The consistent use of high quality warm coloured red brick facings and metal windows, with extensive areas of green roofs, will embed this building into the local area, which itself mainly comprises wide residential streets with brick Victorian villas of substantial scale.



The coordinated and integrated development also includes new fully designed soft and hard landscaping all around the site perimeter that will soften the building's hard edges, enrich the ecological environment, and improve the experience of walking in the streets around the site. On the Orchard site, an existing sports play area will be greatly enhanced in a well landscaped setting, while providing a valuable flood risk mitigation basin.

The new proposals will provide inclusive accessibility throughout sports centre and grounds.

The nature and quality materials of the new construction, combined with re-use of retained buildings and addition of an extensive array of solar panels and areas of green roofs, mean that these proposals will be a development of a very high standard of sustainability.

12.2 Haringey Development Charter

The proposals as described in this Design and Access Statement have addressed the five main points of the Haringey Development Charter:

1. The new proposals address the current negative impact of existing buildings to the local context and neighbouring buildings, and by wrapping new extensions around on three main sides will effectively create the impact of a new building that has a positive relationship with existing structures and, by means of the contextual design measures taken, will work harmoniously with the existing neighbouring structures.
2. The new extensions and refurbishment, combined with excellent new external landscaping and trees, will transform the way the MSC site and building is perceived, into one that supports the historic context and raises the quality of the environment of this sub-area of interest on Bishopswood Road and Broadlands Road.
3. The process of design evolution has involved extensive consultations over a 4-5 year period with the local community, local amenity groups, with Haringey planning and conservation officers, and with independent QRP assessors. This has included public exhibitions for which feedback has been received, recorded on a dedicated website and responded to as the design has been developed. The School entered into a PPA agreement with Haringey that resulted in extensive design, sustainability and technical workshops, and a QRP panel review. After each review, as the design has advanced with response to comments, design reports have been issued that outlined the main points of critique and how the iterations have directly and positively been considered. The assistance of Local Authority officers has been gratefully received.
4. Highgate School has an excellent track record in the delivery of architectural works of very high quality – in recent years this has included careful and sensitive refurbishments to the North Road site historic Chapel, Big School [converted to Library use], Central Building, at Bishopswood Road the Mill Centre, the MSC Pool building and Dining Hall kitchens, as well as the new build Charter main entrance building, the new Junior School and the Pre-Preparatory extension. The selected materials for this project are of high quality, robust and of excellent appearance. The School has an in-house team of very experienced Project Managers and treats all the projects with the same professional and knowledgeable process from inception to completion and beyond. All of the recent developments have demonstrated the significant responsibility that the School has taken in conserving and improving its estate, finding the right balance between conservation and replacement to reflect the character of the campus, while also making a huge contribution to the surrounding neighbourhood and context.
5. This project has adopted a positive sustainable approach by retaining most of the existing building as a resource to be refurbished, then extending its life and functionality by means of new extensions. New energy efficient building services and fabric will significantly enhance the thermal, environmental and sustainable qualities of the building. The provision of new lifts, wider stairs, specialized bathroom and other facilities for all users will greatly improve inclusivity and accessibility. The School has adopted its own Environmental Sustainability Initial Strategy Plan [January 2021], a clear policy for its own operations and for development projects prepared by independent experts to complement measures required by the London Plan 2021, Building Regulation and Local Authority requirements. The project team has monitored the design

evolution so that the final construction will achieve the very best standards of compliance. As the Head has written: *“As a school, we are determined to be part of the solution and we feel optimistic about joining the fight to build a better future for us all and our planet.”*

12.3 Conclusions

The proposed works will modernise this important School indoor sports facility by the refurbishment, alterations and extensions, and significantly extend the life of the retained elements of the existing building. Sport will be encouraged in the School and the Community as a result, and a diverse and exciting range of different sports will be available to boys and girls.

Proposals will also provide significant improvements to accessibility, inclusivity, energy efficiency, fire safety, with minimised carbon footprint for the whole development. The installation of new lift access at various points around the development will provide a more inclusive sports facility for all.

The proposals will successfully achieve the intended aim to create a transformed MSC development which will be a positive contributor to the Conservation Area.