PLUS ARCHITECTURE LIMITED

Proposed Redevelopment of North London Business Park | Brunswick Park, East Barnet

Design & Access Statement | August 2021

Introduction

This Design and Access Statement, produced on behalf of the Comer Group, has been prepared to accompany a Hybrid Planning Application dated August 2021 for a residential-led mixed use redevelopment at the North London Business Park, a Brownfield site of 16.37 hectares between Southgate and East Barnet, North London.

The intention of the masterplan is to develop a robust framework for the integrated and planned redevelopment of this area of underperforming commercial land to a new residential community of homes. It is a 'Design-Led' masterplan that seeks to determine an appropriate organisation of generous new public streets, parks, dwellings and community uses. The proposed development consists of approximately 2,500 dwellings plus a 5th form entry secondary school (1050 pupils) at the existing site; along with ancillary non-residential floorspace to compliment the ammenity of the new community. The masterplan is set in a new parkland setting, providing landscape and recreational ammenity to both new and existing residents.

Contents

The Development Team

New Brunswick Park South, Buildings C and D

Developer	Comer Homes Group
Masterplanner	Plus Architecture Limited
Architecture	Plus Architecture Limited
Landscape Architecture	Hyland Edgar Driver
Planning Consultancy	Daniel Watney LLP
Civil Engineering	Stomor
Energy Planning	MKPG
Ecology Planning	Greengage

New Brunswick Park South, Buildings E and F

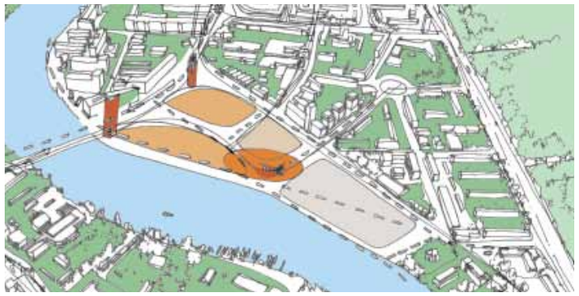
The Development Team

Hyland Edgar Driver Landscape Architects

Hyland Edgar Driver (HED) has a wide ranging portfolio of prestigious and acclaimed work in the UK and overseas with a reputation for design and delivery.

In the UK, HED is landscape architect for the London Olympic Stadium team responsible for the stadium plazas and approaches seen worldwide in 2012 and was responsible for Heathrow Airport Terminal 5, the country's largest construction project, as part of its wider work for BAA.

HED's masterplanning and project experience includes major developments in the UK such as the award winning Gunwharf Quays Portsmouth, fi elds Manchester, Granton Waterfront, Spinning Edinburgh and Battersea Power Station London.



Behrens Ufer Masterplan, Berlin

Plus Architecture

Plus Architecture is a design-focussed studio of architects, interior architects and urban designers based in Dublin.

Plus Architecture is a young practice and was formed in 2011, with it's founding directors having met and gained broad experiance in the offices of O'Donnell & Tuomey Architects and Grafton Architects. Plus Architecture are currently working locally & internationally, with projects in the Republic of Ireland, the UK, Germany and Africa.

Current projects for the Comer Group include the masterplan of Behrens Ufer on Berlin's Spree, incorporating Peter Behrens Haus; the One Ballsbridge redevelopment in Central Dublin and the restoration at Royal Connaght Park, Bushey.

Number One Ballsbridge, Dublin

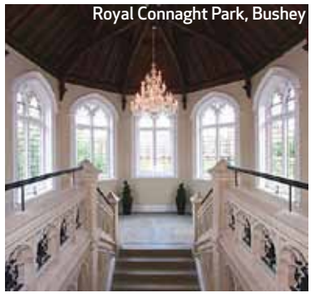
The Comerhomes Group

The Comer Group is one of the United Kingdom's largest and most successful property companies. It now has interests that extend into Europe and the United States.

The current business was established over 30 years ago by brothers, Brian & Luke Comer, originally from Co. Galway, Ireland. After a great deal of tenacity and hard work, the Comers have created a leading property company with substantial development and investment interests in a number of market sectors, including: luxury residential homes, office parks, retail parks, hotels and leisure facilities.

Brian and Luke Comer have been instrumental in recruiting and shaping a highly skilled and valuable senior management team of designers, architects and construction professionals. Corporate ethos nurtures and encourages both creativity and innovation, which are hallmarks of the Comer brand. The Comer Group lead by Brian & Luke Comer has laid a very solid foundation to exploit forthcoming opportunities. Through astute planning and strategy the company is confident of achieving it's ambitious growth plans. Future success is eagerly anticipated as the company continues to implement it's many development plans with inspiration, organisation, reputation and a highly experienced team.

Behrens Ufer Masterplan, Berlin



Royal Connaght Park, Bushey

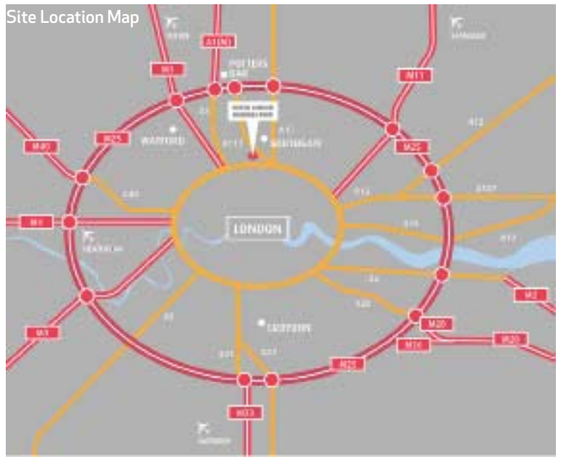
3.0 | The Site

The Site

Aerial View over site from South East


View from top of Site over Office Buildings


Existing Attenuating Lake on site



Outline Description of Site

The site occupies c. 17 Hectares of Brownfield land in a predominantly residential area, located to the west of Southgate and to the south of East Barnet. The site is currently predominantly undeveloped, with c.13 Hectares of the site occupied by grasslands, a lake and unplanned vegetative cover.

Principle Structures on site include c. 380, 000 sqft of office buildings, an above-ground car-parking structure, and an office building currently in use as a secondary school, a Free School opened in the last number of years, Saint Andrew the Apostle Greek Orthodox School. Numerous other small structures occupy the site, including security huts, a banqueting hall and unoccupied office buildings.

The site has two principle entry and exit point, to the south onto Oakleigh Road South, and to the East onto Brunswick Park Road. A redundant and unused site entry and exit point is positioned on the northern boundary of the site, opening onto Ashbourne Avenue and connecting to Russell Lane.

The Site is bound on the southern boundary by the East Coast Mainline railway, providing connection to Moorgate & Kings Cross in Central London.

The most striking feature of the site is the topography, which slopes steeply from the low point of the site, onto Brunswick Park Road (48.0m AOD) to the northern area of the site as it exits to Ashbourne Avenue (72.0m AOD), a level difference across the site of 24m (6 residential storeys).

The Site

Existing Site Layout Plan

Site Location

The site is located in the London Borough of Barnet, c.8 miles to the north-west of Central London. The site lies slightly outside of the circular route prescribed by the A406 North Circular Road.

The site lies in close vicinity to three London Underground Stations (Arnos Grove, Southgate, Totteridge & Whetsone) and is positioned at the mid-point of two National Rail Stations, at Oakleigh Park (to the North) and New Southgate (to the South). The site is well served by Buss connections, which are noted under the Local Amenity Analysis Section of this report.

Local centres of retail amenity include Barnet, Cockfosters and Arnos Grove and smaller centres identified in The Local Amenity Analysis Section of this report, however it is proposed that a masterplan covering c.17 Hectares will generate a requirement for new retail, leisure and landscape amenity functions.

The Site is bound on the Eastern side by New Southgate Cemetery (on the opposite side of Brunswick Park Road) and to the south-eastern and north-eastern boundaries by low-density Two-Storey terraced and semi-detached residential dwelling, of a typology typical of the area.

01 Offices (Barnet Council)
02 Offices (Middlesex University)
03 Offices (unoccupied/ short tenancies)
04 School (St Andrews the Apostle Secondary)
05 Lake
06 Multi Storey Car Park
07 Surface Car Park (Barnet Council)
08 Ariana Banqueting Hall
09 Unused Open Land

The Site


Historic Photo showing Standard Telephones & Cables Building


Historic Photo showing Standard Telephones & Cables Building

Site History

Historic 1879 Maps of the Site reveal that the site at one point housed the Cemetery Station and access route serving the Great Northern London Cemetery (now named New Southgate Cemetery).

In 1922, Standard Telephones and Cables (STC) converted the lands to industrial use, with the opening of a production plant covering the entire site, known as 'The Standard'. Approximately half of the lands were developed with industrial structures, with the remaining land use providing sports facilities for the working population, including a large cricket pitch on the site area fronting Brunswick Park Road.

The Site layout accommodating 'The Standard' appears to have remained until the late 1980's, after which the site was taken over by Nortel, with the industrial structures removed and replaced with the modern three-storey office block and multi-story car park currently on site. Nortel vacated the site very soon after the development and in 2002, the site was acquired by the current land owners, the Comer Group.


1879 Map


1950 Map

1981 Map

1989 Map


Historic Photo showing Standard Telephones & Cables Building

The Site


Existing Attenuating Lake on site


Line of Leylandii Trees to railway boundary


Existing Trees at Hight Level of site

Existing Site Character & Features

The Lake

A substantial Lake occupies the lower section of the site and can be seen once entering the site form the Brunswick Park Road Gate. The Lake is a man0made structure and dates from the mid 1980s. It serves as an attenuating pond, with surface water run-off delivered into the pond from the lands above. The Lake was originally developed in two tiers, with a pumped waterfall, however the pump has not been used in recent times and the upper lake is now dry and overgrown with informal vegetation.

Since its creation, the Lake has come to be a local habitat for Wild Canadian Geese, who rest and feed at the Lake. The Masterplan proposes the Lake as an attractive site feature, important attenuating structure and place of local habitat, as such it is proposed for retention.

Existing Trees

A number of Tree Preservation Orders are in place on the site. The site- and wider context- are also defined by a green and leafy character that are deemed important to preserve in so far as is possible in a comprehensive redevelopment and also to replace, augment and recreate in the delivery of any new residential environment.

Whilst the TPO's seek to protect existing trees of note, a line of leylandii trees is present along the railway boundary on the Southern site edge. Whilst it is noted that these do little to provide comprehensive ecological diversity and block light admittance into the site, they do screen any new views created outwards from the site and their removal would be detrimental to the existing site character, as defined by its heavily planted nature. As such they are proposed for retention within the masterplan, and augmentation with adjacent planting of native species.

The Site

Existing site coutour map at **1m** intervals

Topography

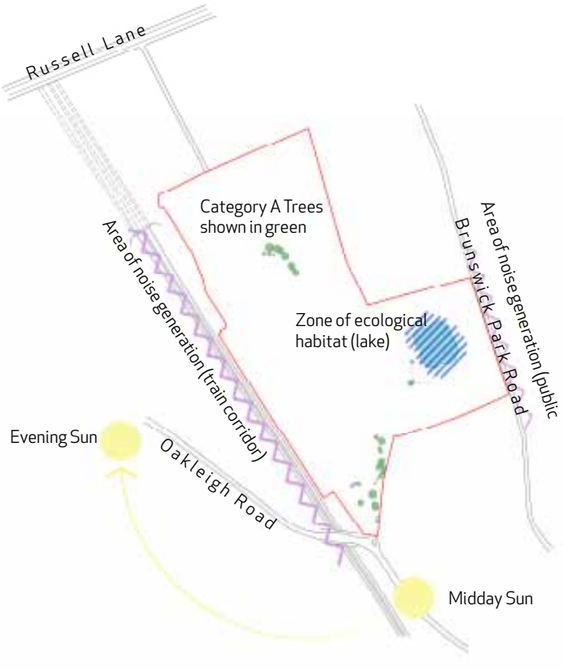
It has previously been noted that the site slopes steeply from it's low point, onto Brunswick Park Road (48.0m AOD) to the northern area of the site as it exits to Ashbourne Avenue (72.0m AOD), a level difference across the site of 24m (6 residential storeys). This topography offers great scope within the masteplan to strategise building height and development density within the lower areas of the site, where their impact upon existing adjacent residential dwellings in the existing highlands can be minimised.

The wider hinterland is best described as a shallow valley of land, falling towards the water course at Pymees Brook. Similarly the opposite side of Pymees Brook rises and the site quickly becomes visible from the other side of the valley at Osidge, particularly on the parallel Roads at Osidge Land, Shamrock Way, Oakdale and Chase Way, as these roads rise to meet at Chase Side. This view of the site will be a key view tested at LVIA stage.

The site is also characterised by certain idiosyncrasies within its own landscaped levels. These appear to be borne out of historic movements of lands within the site's recent history, as industrial buildings were removed and replaced, spoil resultant form land cut-and-fill has been moved, mounded and banked to create certain land features currently visible on site.

View of site from Chase Way

The Site



Environmental Character

The site enjoys good solar admittance on its long south-western facing boundary to the railway line, albeit slightly reduced by the existing line of leylandii trees on this boundary. The railway impacts upon the site in its acoustic properties as trains travel past the site, however otherwise the site is characterised by the lack of direct impact of primary traffic route noise generation.

A full ecological assessment of the site is underway and has so far revealed little above the range of urban flora and fauna usually present on vegetated brownfield land. One obvious exception to this statement is the habitat provided for Wild Canadian Geese.

Completed Surveys

The following surveys, to form part of the EIA, are complete, underway or noted for completion:

- Ecology- Reptiles
- Ecology- Reptiles
- Ecology- Bats
- Ecology- Great Crested Newts
- Archaeology
- Soil Contamination
- Tree Survey / Arboricultural
- Traffic Counts
- Noise Surveys
- Air Quality
- Utilities
- UXB Ordnance

The Site


03


04


05


06


07


08

Existing Buildings & Tenants

Prior to their vacating the site in 2002, Nortel developed the principle structure on site, a three storey office building, constructed in white powered coated aluminium panels and horizontal glazed storey-bands. The principle tenant in this building is Barnet Council, who have recently indicated that they will be exercising a lease break clause and vacanting their space in 2015. Middlesex University are the other main tenant of this building, along with a number of small enterprise occupants. The office space in the North London Business Park is substantially unoccupied, a situation to worsen on 2015 when Barnet Council leave site.

Despite the land zoning and a sustained effort to attract office occupiers over the last decade by the current landowner, office tenants have not taken up space in the North London Business Park.

A number of other separate and smaller buildings, of historic office use, are present on site.

In the northern area of the site, a former Social Hall used by the STC Site is currently in occasional use as a banqueting venue for weddings, named Ariana.

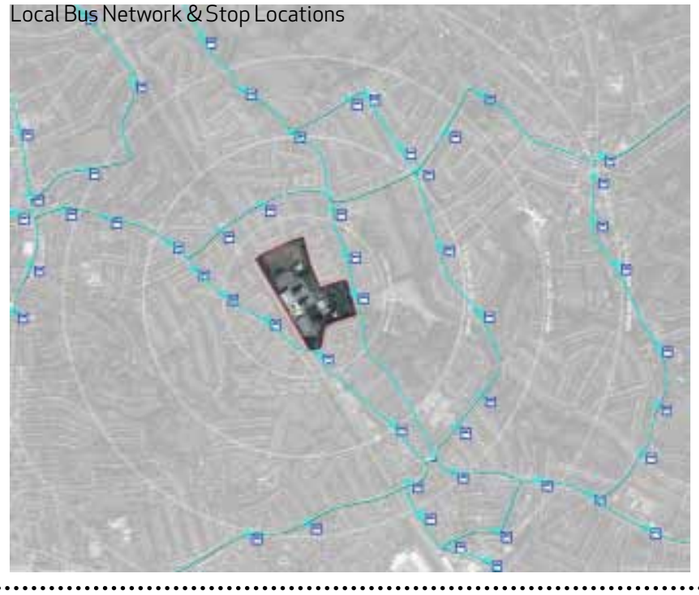
The St Andrew the Apostle Free School, a secondary school, established itself on the site in the last number of years, occupying a converted office building. The accommodation is adequate, but temporary and insufficient to provide for the growing school population.

In collaboration with the Russell Educational Trust, who manage the academic planning and facilities organisation for the School, a portion of land within the NLBP Masterplan has been identified as suitable for the School. It is deemed that the school use will enrich the masterplan and add to the objective to sustainably plan both the new residential community and existing wider community.

4.0 | The Location

The Location

1 Oakeigh Park Railway Station **2** New Southgate Railway Station
3 Arnos Grove Tube Station **4** New Southgate Tube Station

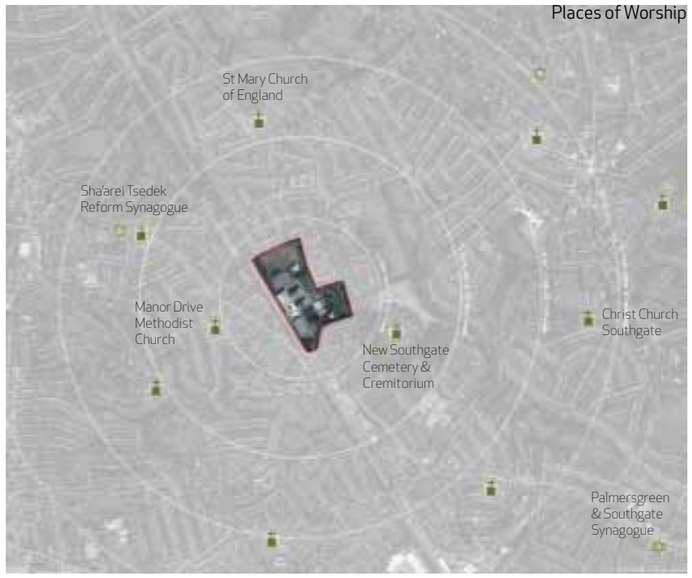


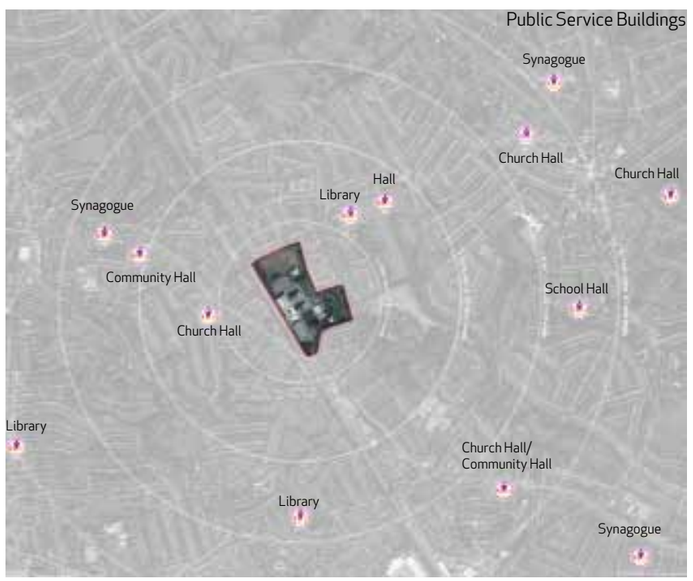
Local Ammenity Analysis

An analysis of Local Amenity Analysis has been undertaken under the following headings, which are graphically presented in this report:

- Railway Connections
- Primary Vehicular Routes & Connections
- Local Bus Network & Stop Locations

The Location





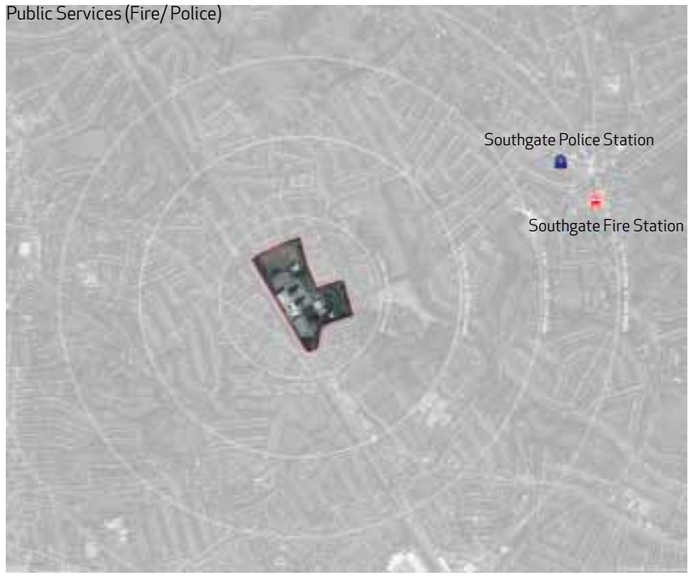
Local Ammenity Analysis

An analysis of Local Amenity Analysis has been undertaken under the following headings, which are graphically presented in this report:

- Places of Worship
- Existing Schools & Infant Nurseries
- Medical Services
- Public Service Buildings

Playschool
Nursery
Primary School
Secondary School
Tertiary School

The Location



Local Ammenity Analysis

An analysis of Local Amenity Analysis has been undertaken under the following headings, which are graphically presented in this report:

- Public Services (Fire/ Police)
- Local Retail Services
- Recycling Services
- Banking & ATM Locations

The Location


Denham Road
100 units/ hectare


Parkwood Estate
80 units/ hectare


Nurserymans Road
85 units/ hectare


Brunswick Park Road Context
18-25 units/ hectare (estimate)

Existing Context Analysis- Scale, Density & Housing Typologies

The prevailing environment in East Barnet is characterised by its settled residential character, typically provided in semi detached and terraced dwelling, developed in the early-to-middle of the twentieth Century.

Density is not high by contemporary standards in urban/ sub-urban locations, located in relative proximity to public transport infrastructure, existing local services and established amenity parkland. Density for the 'typical' East Barnet residential layout is estimated at between 18-25 units/ hectare, based on typical urban development density achieved between the pre-WWII.

A number of small infill sites have been developed in recent times within 500m of the subject site; these have been developed as multi-family dwelling block and achieve densities between 80-100 units per hectare.

Existing Context Analysis- Local Landscape Character

The existing Local Landscape Character is defined as verdant and established.

- Principle vehicular distribution roads are tree-lined
- A green verge is generally present on both sides of public footpaths, with occasional use of planter median strips between carriageways
- Dwellings present themselves to roads with front garden spaces, which at best are well planted; how ever at worst are over-provided with car parking and present poor individual bin management to the street
- Roads are not 'unrelenting' and the viewer's vista breaks frequently to allow for parkland, cemeteries, sports pitches & undeveloped and overgrown vacant sites.

5.0 | Objectives of the Masterplan

Understanding of Context

The Masterplan seeks to understand the unique challenge of developing a large new residential settlement in an established receiving environment

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The Masterplan understands that the local verdant character can be the key uniting feature between existing and new residential development

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Utilising the distinctive site topography to 'nestle' the new built environment into the land, thereby reducing impact locally and from wider viewpoints

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The delivery of larger residential units, in a mix of apartments and houses, catering for the needs of individuals and families

Creation of Memorable New Places

Prioritising the Design of the Public Realm, as the basis of a high-quality shared urban environment and the robust framework for later phases

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Providing a generosity of dimension to streets, courtyards and new parkland setting, in keeping with a sub-urban character

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Working with simple and established urban & sub-urban typologies of safe and supervised streets, squares and parks- not reinventing or subventing typologies that are known to work

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Careful management of site parking, to avoid a proliferation of surface parking and manage hidden parking within the sloped topography

Delivering Community Infrastructure

The proposals will integrate generous new parklands spaces in to the fabric of the new places and spaces

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The proposals integrate and develop the needs of the growing Educational Institution of St Andrew the Apostle Secondary School

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The proposal will open up and enable increased connectivity and pedestrian routes between existing residential communities surrounding the site

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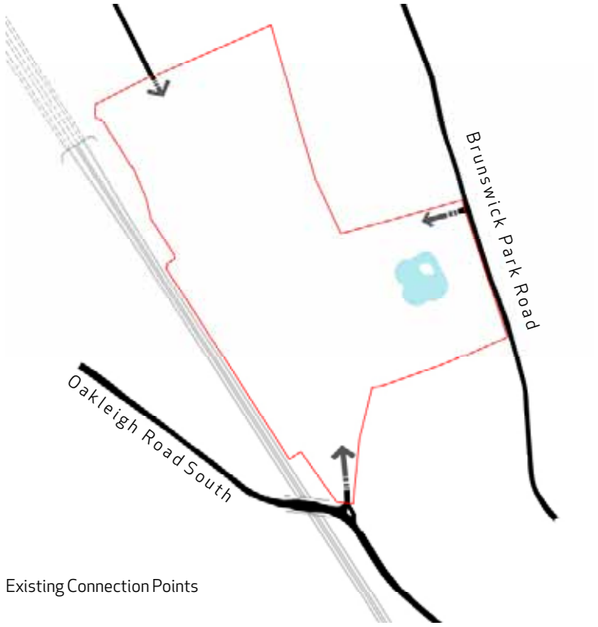
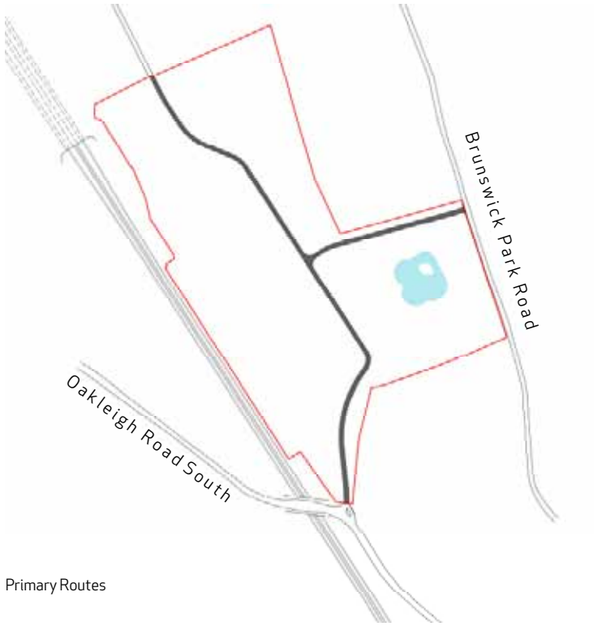
New local retail and community services will be incorporated into the development

6.0 | Masterplan Strategies

Masterplan Strategies



Existing Connection Points



Primary Routes

'The Parkway'

Green Routes connecting to 'The Parkway'

Connections into site

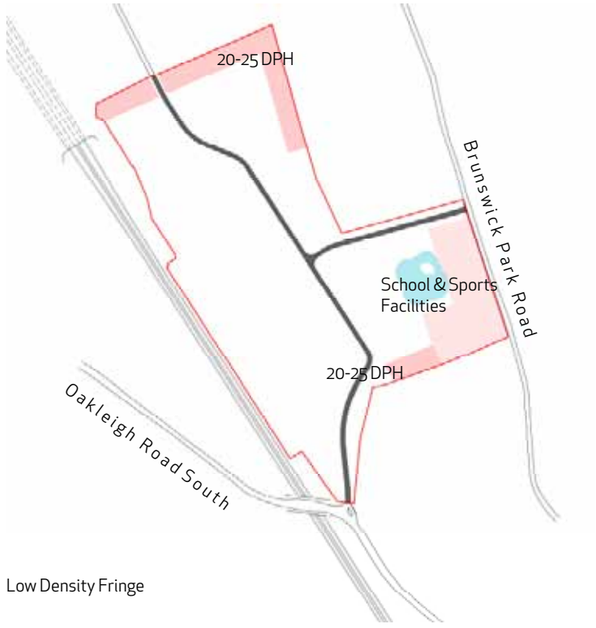
Existing routes into the site are located at the Southern boundary junction with Oakleigh Road South and at the Road frontage to Brunswick Park Road. An extinguished connection at Ashbourne Avenue, connecting to Russell Lane, is proposed for re-connection, albeit for pedestrian, cycle and emergency traffic only, thereby avoiding any negative consequence for existing residents adjacent to the site.

Connections through the site

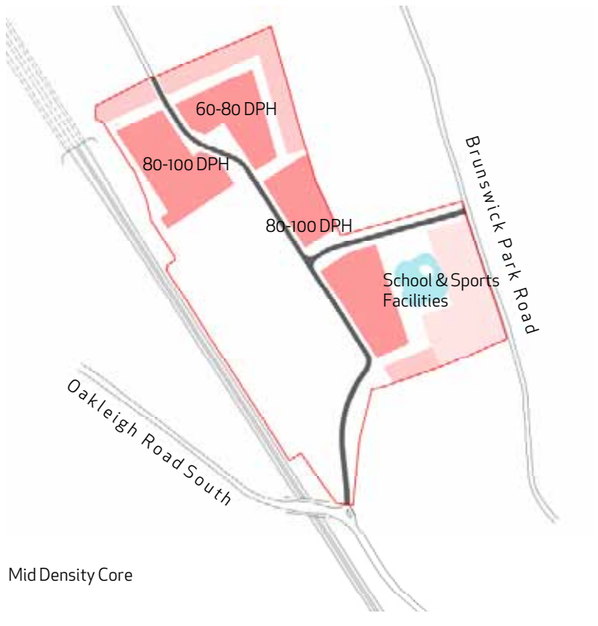
Primary connections through the site are organised so as to recognise the integration of route into the site into a planned and formal 'Parkway' Space, serving to promote the first experience of a 'sense of place'. Route connecting into the Parkway, from Oakleigh Road South and Brunswick Park Road, are conceived as heavily planted green 'Boulevard' routeways.

Early Concept Sketch 'The Boulevard' at Brunswick Park

Masterplan Strategies



Low Density Fringe



Mid Density Core

Area Proposed for Higher Residential Density

Density Strategy

Density is proposed to be managed with a few simple strategies:

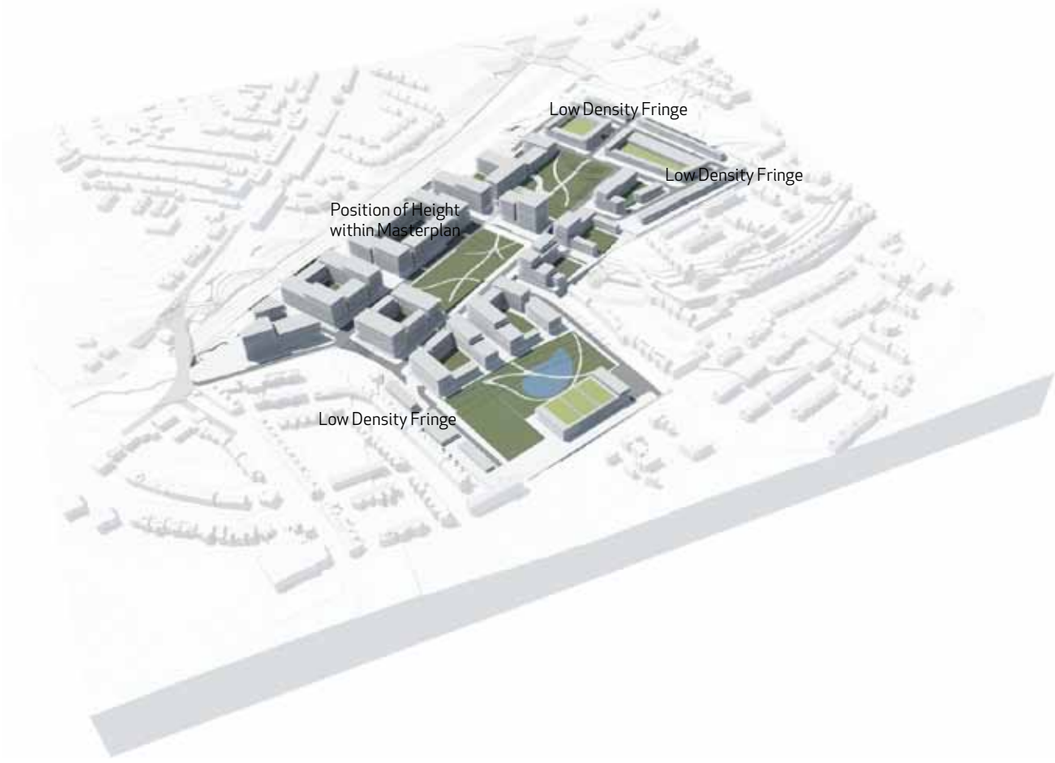
- Establish a low density fringe, where the development lands meet sensitive conditions of abutting rear gardens of two-storey housing. Answer these conditions with identical back-to-back rear gardens of new terraced own-door dwellings facing into the masterplan
- Provide a mid-density inner layer, avoiding any overlooking, overshadowing of over bearing impact of new residential development to existing residential units.
- Encourage higher densities in the core of the site, away from existing dwellings, adjacent to the railway on the south-western edge, and within the lowlands of the site, where higher buildings have less impact.

These density zones are set with the following target parameters:

-
- Low Density- 20-25 Unit /Hectare
- Mid Density- 80-100 Unit /Hectare
- Higher Density- 120-180 Unit /Hectare

Masterplan Strategies

Height Strategy Diagram showing Section Line



Height Strategy

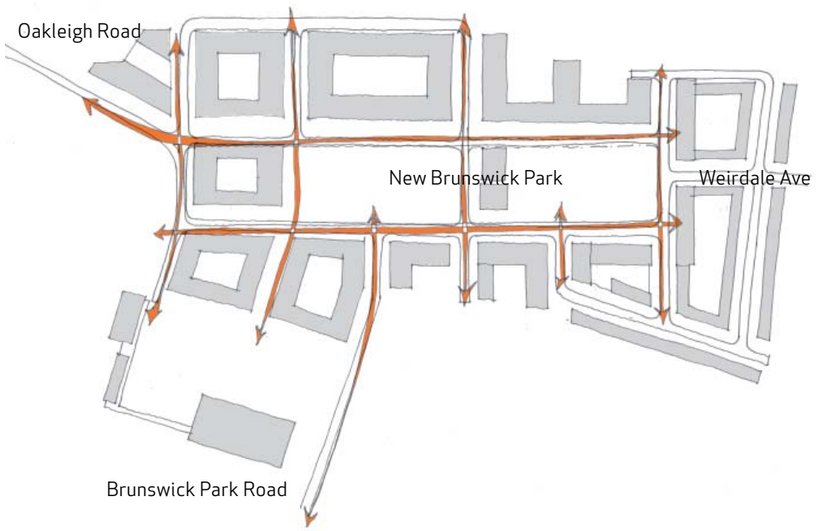
The development height strategy is related to the density strategy, where buildings of lower density and of two story plus attic are deemed an appropriate response to the fringe connection. As the site moves away from the established character, taller buildings that avoid undue impact upon adjacent existing residential amenity are planned.
As the site moves away from adjacent land boundaries, and coincidentally falls in level, taller buildings in these low-lands mitigate against the common failings of taller buildings planned within any masterplan.

Low Density
20-25 Unit /Hectare
2 storey, plus setback level 3

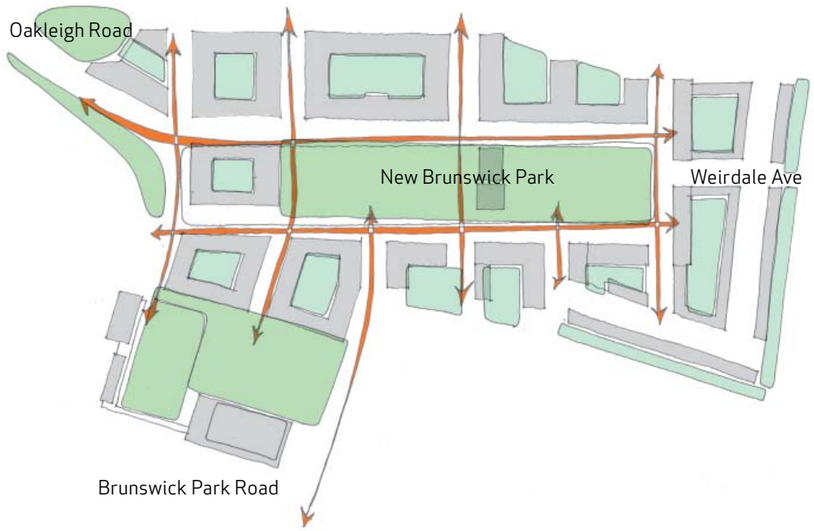
Mid Density
60-80 Unit /Hectare
up to 8 storey

Higher Density
80-120 Unit /Hectare
up to 13 storey

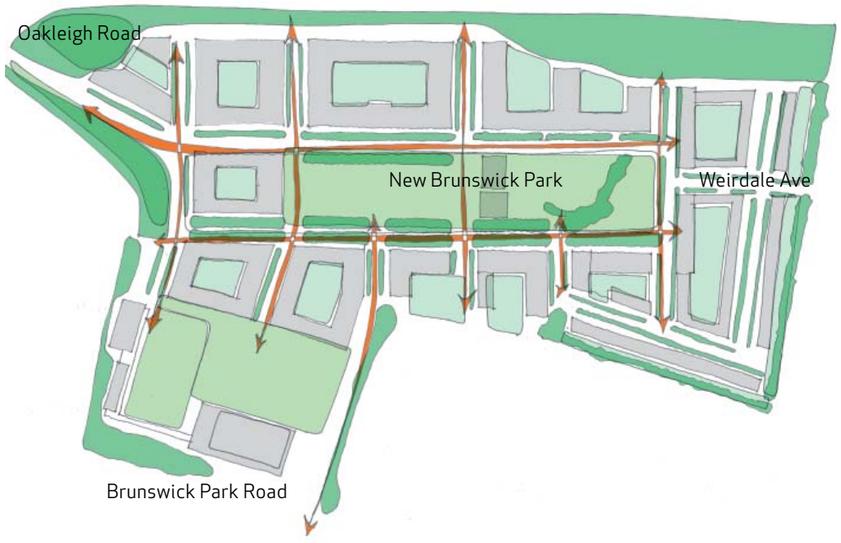
Movement Strategy



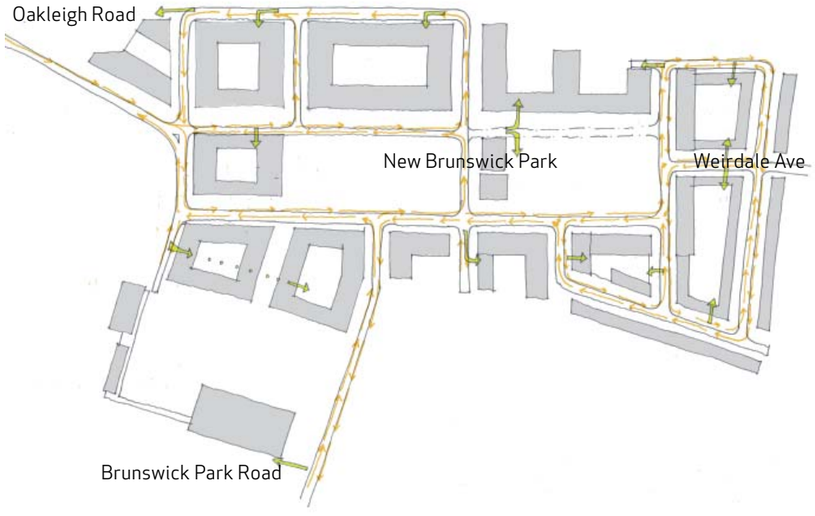
Block Distribution | Pedestrian Movement



Block Distribution | Pedestrian Movement | Disposition of Open Space



Block Distribution | Pedestrian Movement | Disposition of Open Space | Tree Planting



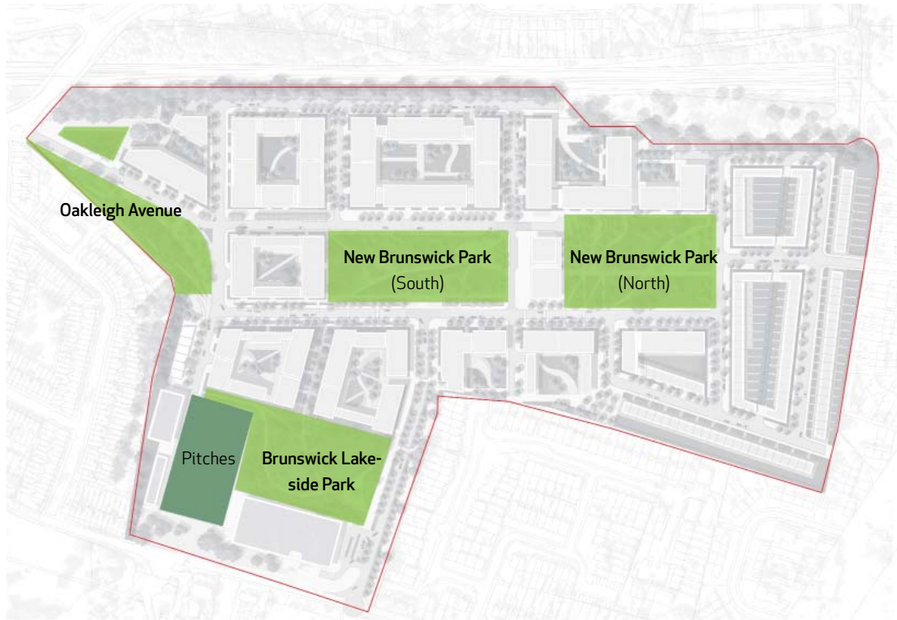
Block Distribution | Vehicular Movement | Car Park Entry

Block Planning has been organised by first understanding the principal routes and connections to be established within the masterplan. As important to the principal routes is the memorable positioning of shared open spaces and parkland. Whilst the lake is fixed and implies an open parkland to provide it setting, it was decided early to accommodate a large and generous central green park at the intersection of the principal connecting route on site, New Brunswick Avenue, from Brunswick Park Road, and the central connecting Parkway. This public space "New Brunswck Park South" is a formal park and measure c. 160m x 80m.

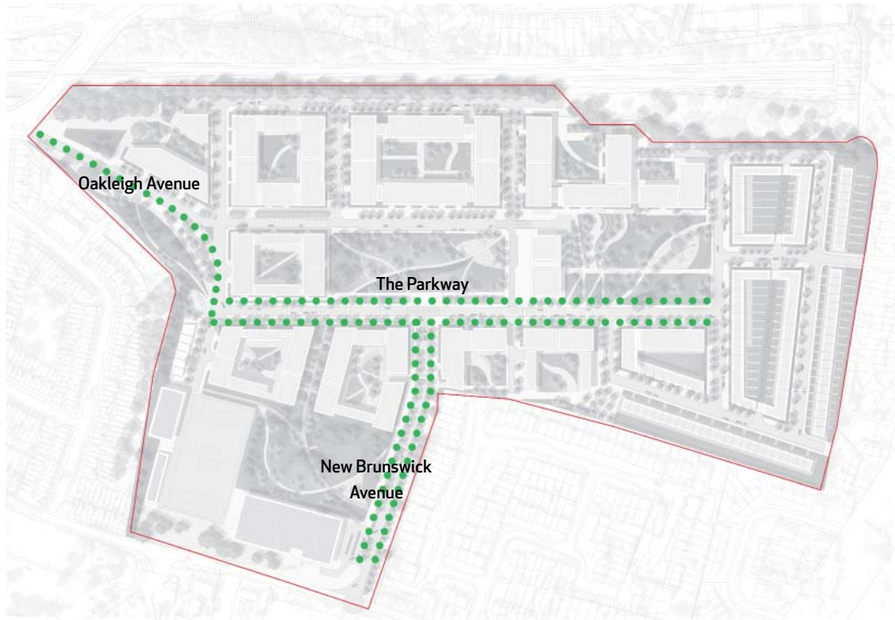
Block Planning as it emanates from New Brunswck Park South adopts the following characteristics:

- Generally planned to allow safe and secure 'doughnut' configurations of blocks, with shared internal gardens, of minimum internal width 30m (with larger opposing dimension).
- Traditional street, overlooked on both sides, allowing slow movement of cars and managed visitor parking on-street.
- New streets to be tree-lined, be provided with parallel parking bays, cycle lanes, planted verges and adequate privacy space between footpath and domestic ground level window (min. 2.0m)

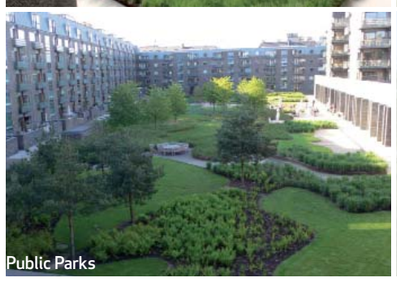
Movement Strategy



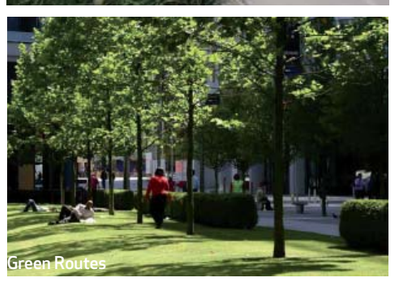
New Public Parks



Green Routes



Public Parks



Green Routes

The Masterplan has formalised the principal urban design strategies into a number of summary diagrams is as follows:

1. Public Parkland
2. Green Route
3. Vehicle Movement
4. Pedestrian Movement
5. Uses supporting the Residential Community
6. Character Areas

Public Parkland

Public Parkland is a key feature of the masterplan and all new residential blocks have been designed to have aspect onto green space of differing character. The new public parkland is principally offered to provide general outdoor amenity, sport and play space. It is also an important visual and environmental amenity, acting as a 'green lung' to the new community.

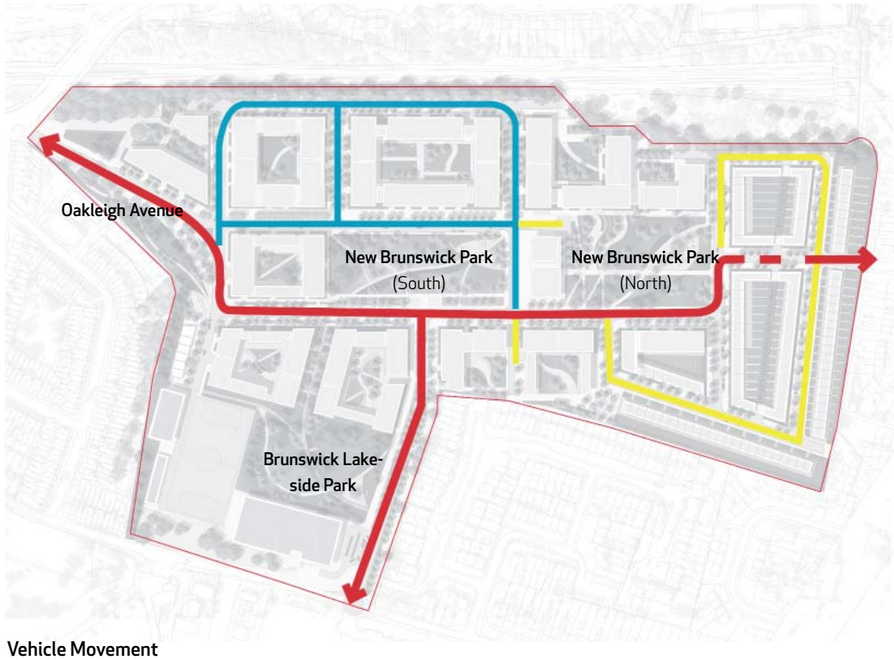
Green Routes

Green routes are an element of the masterplan that seek to connect public parkland within the masterplan and also to ensure the main public thoroughfares are provided with high quality and generously designed margins.

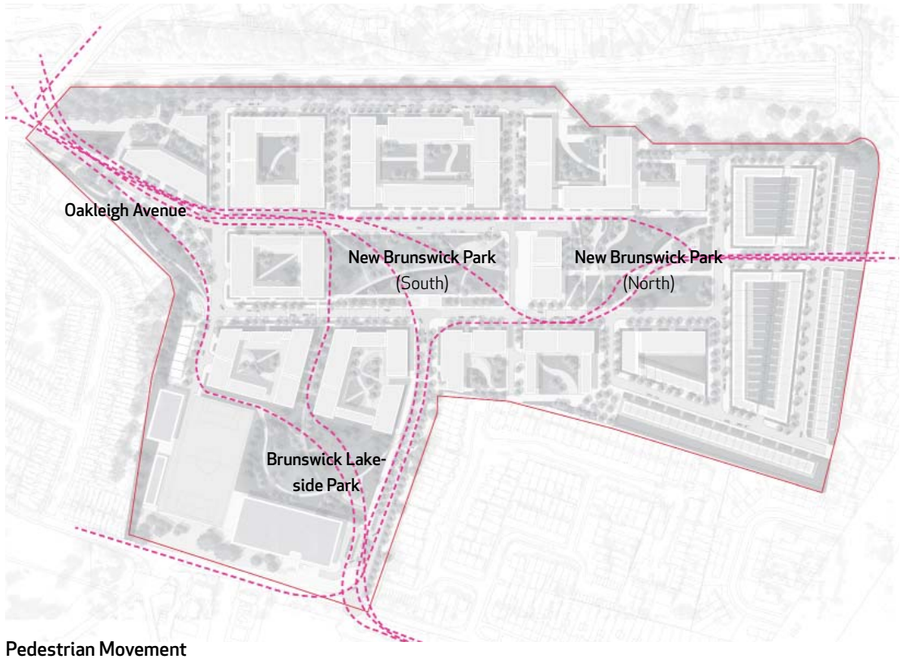
The Parkway is the central spine route within the masterplan that connects all principal Character Areas, from New Brunswick Park South to the Northern Homezones.

Entry Avenues from Oakleigh Road and Brunswick Park Road, existing off-site streets, are wide planted entry routes, providing a defined character to visitors and residents as the enter the masterplan area.

Movement Strategy



Vehicle Movement



Pedestrian Movement

Pedestrian Priority Streets

Pedestrian Routes

Vehicular Movement

Movement within the masterplan has been considered as the connection of parkland spaces with green routes. It is not conceived that the masterplan will become part of the wider public street network, albeit the site does act as a vehicle connection between Oakleigh Road South and Brunswick Park Road.

Passive discouragement of traffic passing through is proposed in the masterplan through design features in the public landscape. Vehicles are none-the-less free to use all primary and secondary streets within the masterplan, and a traditional arrangement of streets provided with parallel parking for visitors is proposed in most streets of the masterplan. Tertiary streets will be typically used only by residents for access.

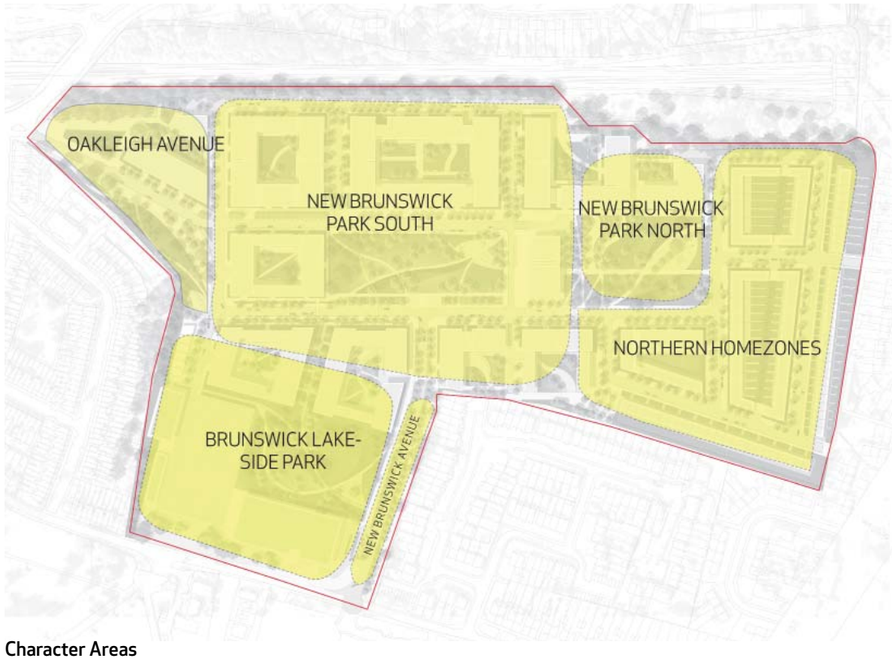
Pedestrian Movement

The masterplan does open up the site to pedestrian traffic, both for new residents leaving and entering the site, with a variety of access locations and for the wider community as a new permeable pedestrian environment.

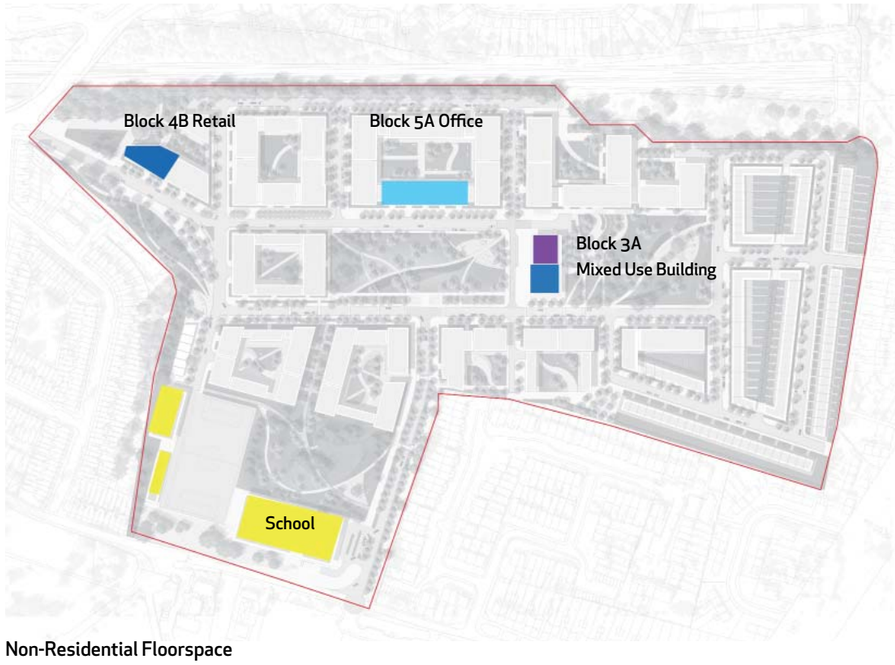
Improved connections include the Oakleigh Road South and Brunswick Park Road entrances, as well as a new pedestrian and cycle connection to the north of the site at Weirdale Avenue.

Multiple route options within the site are presented to pedestrians, allowing access to all public parkland space as well as the non-residential floorspace supporting the new community.

Character Areas

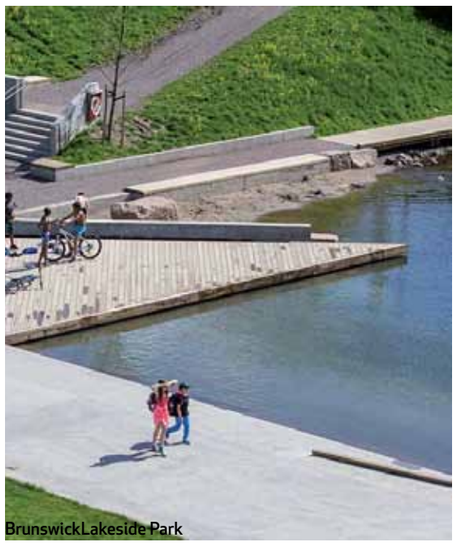


Character Areas



Non-Residential Floorspace

New Brunswick Square South



BrunswickLakeside Park

Nre Brunswick Square North

Northern Homezones

Character Areas

As identified in the Design and Access Statement accompanying this application, Character Areas have been identified within the masterplan area to assist in guiding the scale, mass and detail resolution of buildings within the masterplan as they come forward for detail planning. These Character Areas have been identifies as follows:

- New Brunswick Park (South)
- New Brunswick Park (North)
- Brunswick Lakeside Park
- Oakleigh Avenue Gardens
- Northern Homezones
-

Character Areas are a key principle of the masterplan and attempt to provide coherent new places and spaces, as setout in the parameter plans and detail guidance outlined in Section 5.0 and Section 6.0 of this document.

Non-Residential Floorspace

Non-residential floorspace is proposed within the masterplan in recognition that a new and sizeable residential community will require certain infrastructural support. Critically, the Detail Phase 1 application will provide a new Secondary School and re-house the growing St Andrew the Apostle School on site. Further non-residential floorspace will be provided as follows:

Mixed Use Building Block 3A
- 300msq Childcare/ nursery space
- 650msq Café/ Retail Space
- 510msq dedicated community space
- 860msq Incubator Office Space

Oakleigh Avenue Entrance Building 4B
- 503msq Retail

Block 5A fronting New Brunswick Park (south)
- 2,354msq Incubator Office Space

7.0 | Masterplan Evolution

Masterplan Evolution

Masterplan presented to GLA
25th June 2018

Masterplan Revisions
12th August 2018

Masterplan Revisions
24th September 2018

Application Masterplan August 2021

The Masterplan that forms the basis of this hybrid application has developed from an earlier Masterplan, by the same consutlant team, dating back to 2013.

In 2020, this Masterplan was granted at appeal (APP/N5090/W/17/3189843) by the Secretary of State to the Comer Homes Group, for redevelopment of the lands at North London Business Park, Oakleigh Road South, London N11 1GN (LB Barnet Application Ref: 15/07932/OUT)

The masterplan was commenced in 2013 and underwent a long process of planning engagement. Given the considerable amount of time elapsed since the original design of the masterplan was undertaken, the design and planning team have taken the opportunity to explore the density of the scheme in light of emerging policy and guidance.

Masterplan Evolution

Masterplan presented to GLA 25th June

The consented masterplan is characterised by a generous provision of open space, parking provision and large apartment sizes. Emerging policy and guidance would facilitate an alternative approach to some fundamental elements of the scheme, even within the permitted planning envelope, without unduly effecting the provision of open space within the scheme

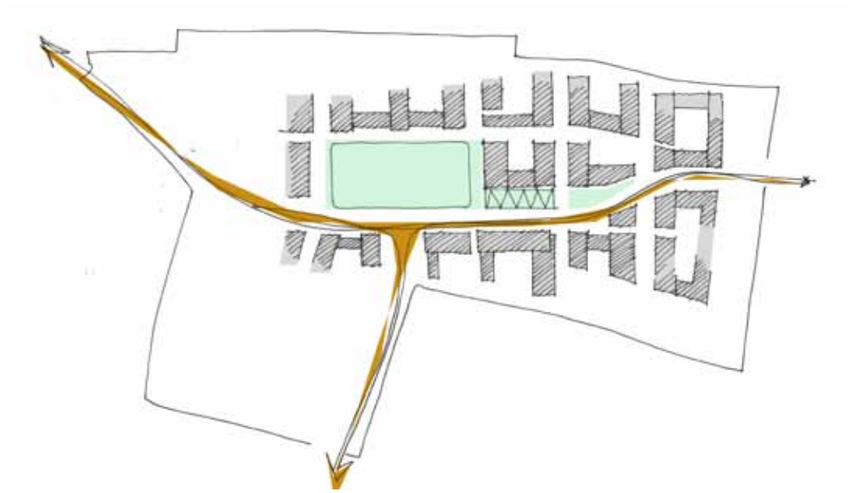
The first Masterplan presentation to the GLA/ LBB occured on the 25th June 2015 , the stage of development is represented on these pages.

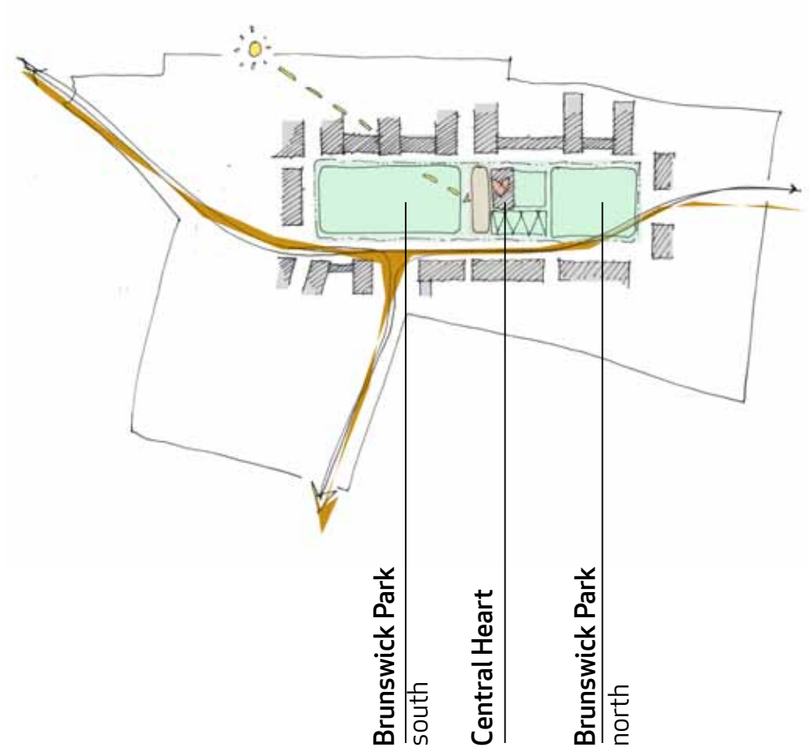
Primary Connections

Primary & Secondary Connections

Pedestrian Connections

Masterplan Evolution





Central Area Density & Open Space

GLA Observations
"a number of awkward routes"
"A lack of genuine flexible open space"
"questionable residential quality"

Increase Central Park to accomodate increased shared open space

Introduce Housing Typology at the northern edges of the masterplan, similar to adjacent housing patterns

Potential for Mixed Use Building to act as central masterplan heart, with community, local retail and service functions

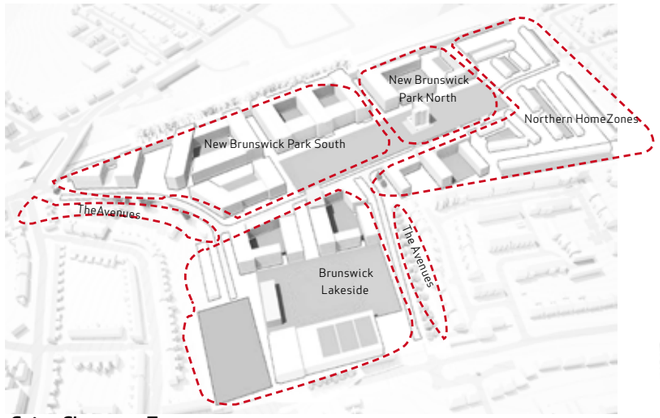
Following the first stage of GLA/ Barnet Feedback the Masterplan was encouraged to present a less dense ground cover, but to achieve housing quantum with taller buildings covering less groundspace.. This would also aliviate other related concerns:

- Preservation of more Trees
- Higher provision of open space and a more open character
- Fringe character of the master-plan adjacent to the existing character (more houses suggested)

Open Space/ Landscape
Following the first Masterplan review, the GLA/ Barnet suggestested he character of the open space wasa to be further reviewed, with a suggestion that a less formal and more parkland character was appropriate. The railed London square was deemed inappropriate.

Masterplan Evolution

Masterplan Revisions 12th August



Defining Character Zones

Areas examined in Design Revisions

Masterplan presented 12th August 2015

The second Masterplan presentation to the GLA/ LBB occured on the 12th August 2015. The significant amendments to the masterplan at that stage are outlined as follows:

Central Building
Interrogation of the orientation, form & ground level relationship of the central mixed-use community building

Northern Homezones
Simplification of the layout & frontages facing streets, including elimination of blank gables & improved link to Ashbourne Avenue

Oakleigh Road Entrance
Building reposition (setback) to respect existing tree positions

Southern Masterplan Area
'tightening up' of masterplan to organize simple courtyard blocks overlooking an orthogonal street pattern of 'traditional' street character

Tree Preservation
A recasting of the masterplan layout to ensure a higher quantum of tree preservation can be enabled

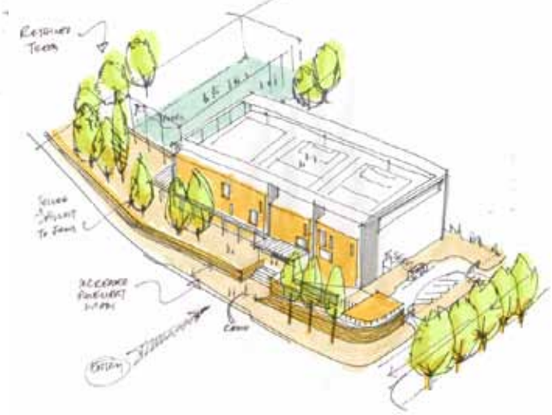
Design of the School
Increased setback from Brunswick Park Road, Increased open space provision for the school, vastly increased tree preservation & the provision of a building 'shield' to the rear gardens of Brunswick Crescent (off site).

Masterplan Evolution

Enhanced Tree Protection

Entry at Oakleigh Road

Sketch showing school edge to Brunswick Park Road



Sketch showing school edge to Brunswick Park Road

School Entry to Brunswick Road

The Masterplan presented to the GLA on the 24th September allowed for a significant amount of additioanl tree retention on site.

The revised masterplan outlined measures to preserve existing trees over-and-above those retained in previous masterplan iterations. Measures to alter the masterplan layout yielded increased tree retention in the following areas:

- Oakleigh Road (South) Entrance
- Brunswick Road frontage
- The North-South Access routes
- Brunswick Park

Significant improvement to the masterplan is proposed to retain the mature planted edge to Brunswick Park Road and setback the school building further from the Road edge.

With the adoption of an increased setback of the school building to Brunswick Park Road, the retention of trees facing this Road was enabled, acting as a mitigating green screen to soften the impact of the school. Further tree retention was observed possible by a similar setting back of the sports pitch into the site, with the pitches tall fencing effectively screened by these retained trees.

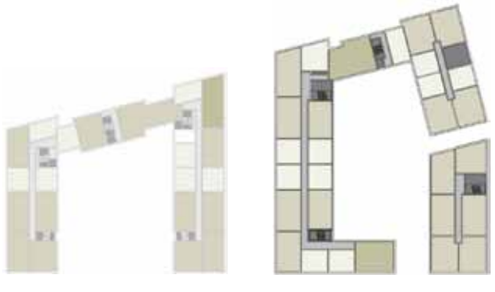
The resultant design proposal following the final GLA review of the extant masterplan is one that retains a vastly improved percentage of trees, an increased building setback to Brunswick Park Road and building screening using existing retained trees.

8.0 | The 2021 Masterplan Revisions

The 2021 Masterplan

2020 Consented Scheme Schematic Layout

Typical Plan Blocks C & D: 2020 Consented Scheme



Proposed Design Amendments Schematic Layout (November 2020 Re-

Typical Plan Blocks C & D: Proposed Design Amendments (November 2020 Review)

Review of Detail Area Layouts

As outlined in the preceeding section, he masterplan was commenced in 2013 and underwent a long process of planning engagement. Given the considerable amount of time elapsed since the original design of the masterplan was undertaken, in November 2020, the design and planning team took the opportunity to explore the density of the scheme in light of emerging policy and guidance.

Within the area of the detailed planning consent, a review of the approved layouts was undertaken to determine how internal layout efficiency within the blocks could be improved. A few ground rules were established:

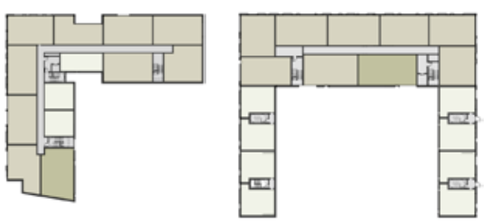
- The mix of units should stay generally the same as the planning consent, although the opportunity to increase the percentage of 3-bed units across this area was explored.
- The existing consent contained generously planned units. Any re-design would ensure that units remained comfortably in excess of minimum space standards prescribed through the London Plan. Accordingly target unit sizes are:

1. 1-bed (2 person) 50 sqm;
2. 2-bed (4 person) 80 sqm;
3. 3-bed (5 person) 95 sqm;

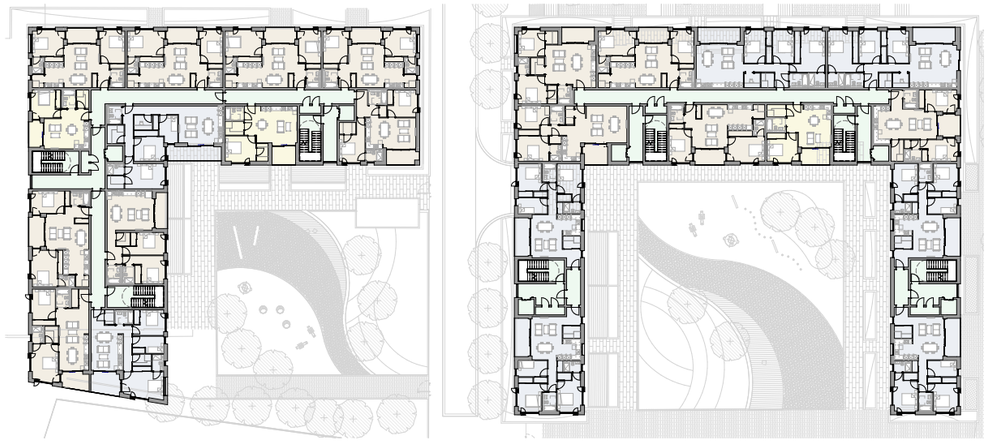
The 2021 Masterplan

2020 Consented Scheme Schematic Layout

Typical Plan Blocks E & F: 2020 Consented Scheme



Proposed Design Amendments Schematic Layout (November 2020 Review)



Typical Plan Blocks E & F: Proposed Design Amendments (November 2020 Review)

Review of Detail Area Layouts (cont'd)

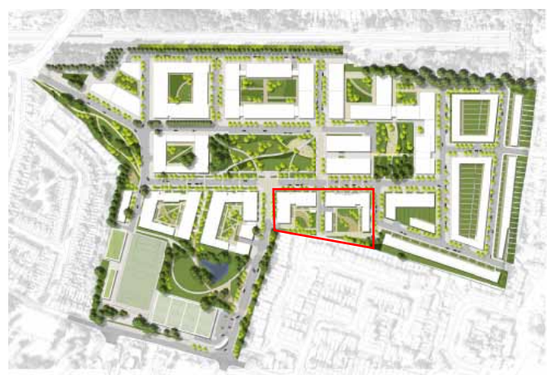
- Efficiency gains were mostly targeted on a reduction of the non-net space, such as cores, circulation, corridors etc.
- No more than 8 units per core would be provided, or in the cases of connecting corridors, 2 cores would serve no more than 16 units.
- As a result of these amendments, in the case of Blocks 1C and 1D as illustrated on this page, the unit numbers in Blocks C and D were projected to rise c. 20%

The Consented Scheme unit breakdown is as follows:

- 20% 1-bed
- 65% 2-bed
- 15% 3-bed

Foloowing the November 2020 review, the Proposed Design Amendment unit breakdown was as follows:

- 26% 1-bed
- 53% 2-bed
- 21% 3-bed



The 2021 Masterplan

Full Phase Masterplan

Review of the Outline Masterplan Area Layouts

The outline areas of the masterplan were analysed to determine what target apartment count on site could be possible if the metric analysis of the detail phase areas were applied to the outline phase area. This was undertaken as follows:

1. The average apartment GEA area achieved in the efficiency review of the detail planning area was calculated. On the basis of the unit breakdown outlined in the preceding pages, this figure was found to be 110.8msq (ie. 419 residential apartments occupying a Phase 1 total development GEA of 46,440msq)

2. The average unit GEA was divided into the overall outline area masterplan GEA provision per block.

3. The result was the apartment target schedule produced on this page, with a total residential unit count of **c.2000** units across the full phase development.

4. This calculation is based on improved efficiencies within the existing building footprints and is not a result of any additional storeys across the development.

The 2021 Masterplan

Full Phase Masterplan with suggested increase to Building Heights

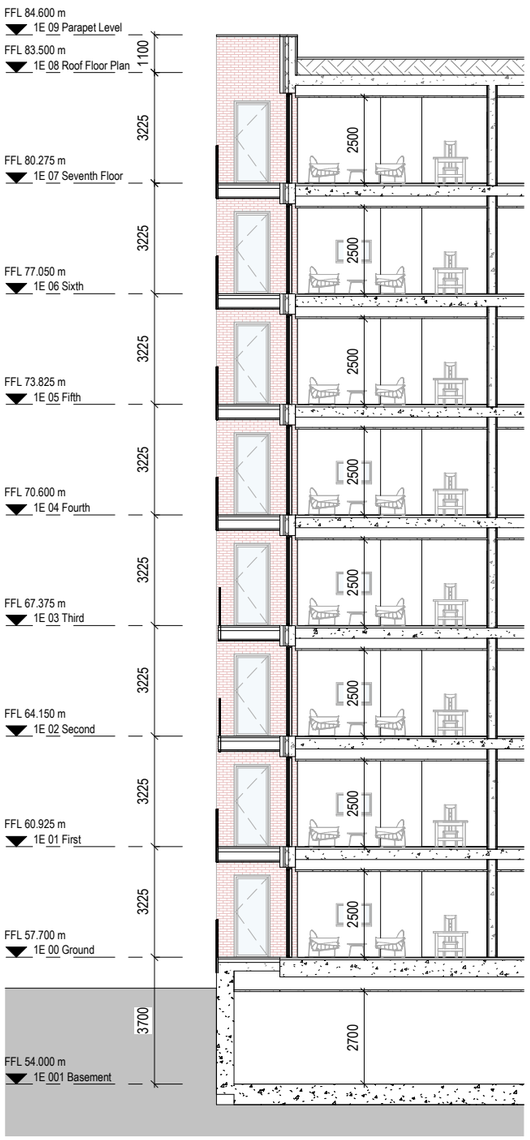
Additional Height in the Masterplan

The November 2020 Design Review also explored the principle of achieving additional height across the masterplan in the context of the appeal decision. The adjacent image is a suggestion of where additional height could be achieved across the site without harming the townscape justification for the development quantum or affecting any residential neighbours, summarised as follows:

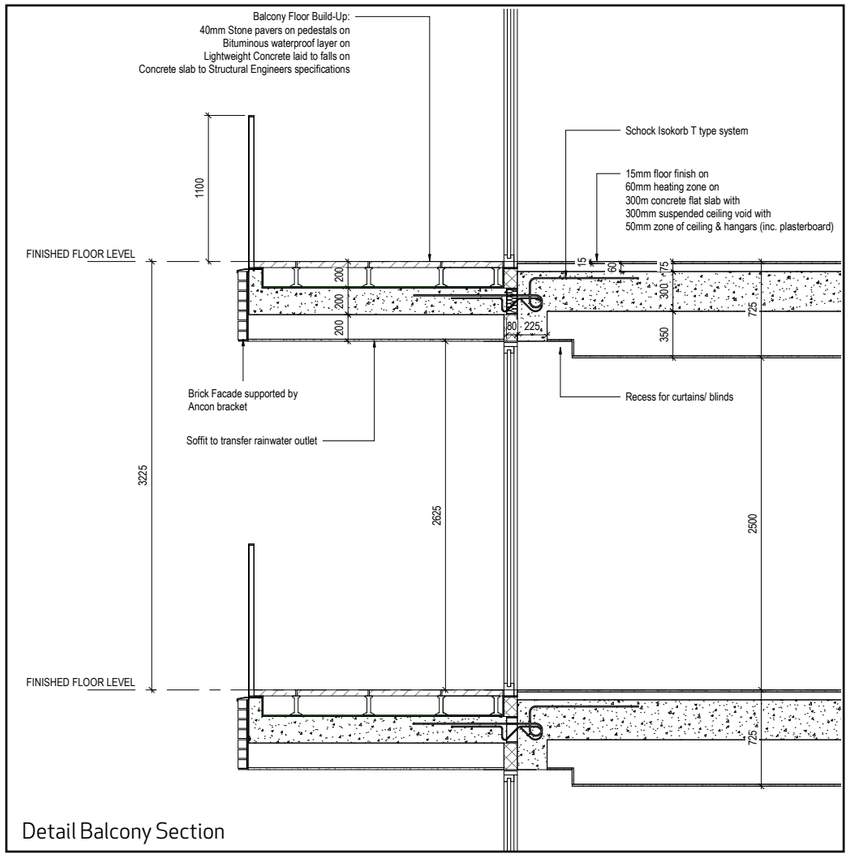
- The positioning of the additional storeys is on the basis that this height is not proximate to any sensitive receptors including the closest residential neighbours;
- The height is located so that any additional shadow cast by the buildings does not unduly affect levels of sunlight and daylight received by the public open spaces;
- With regard to the townscape and visual impact assessment submitted with the original application, there is scope to accommodate additional height in specific locations across the masterplan without causing townscape harm which has informed the location of the uplifts.

It was calculated that the additional height identified in the adjacent image would result in an additional 400-500 residential dwellings across the site.

The 2021 Masterplan



Building Envelope Section

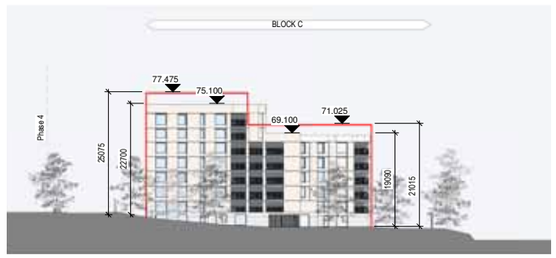


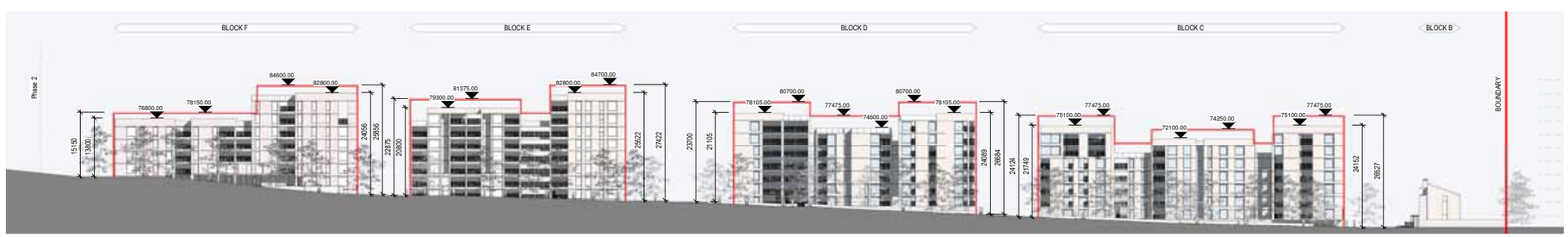
Detail Balcony Section

Increased Floor Height in the Masterplan

The redesign plans all layout alterations within the envelope of the existing consent. The position of window fenestration and balcony positions will change, however it is the intension to maintain the provision of high quality and durable façade materials permitted in the extant consent- brick, glazing provided in floor to ceiling proportion, stone and metalwork.

As the detail of the building service strategy has developed, it is the intention to provide sprinklers for enhanced fire safety and underfloor heating (a decision borne out of the Part L compliance strategy) for both these reasons it is proposed that the floor-to-floor dimension of 3m contained in the planning consent rises to 3.225m to accommodate the increased floor build-up. This has the effect of marginally increasing the building heights, however, in our opinion, not in a manner that materially alters the conclusions of the Townscape Visual Impact Assessment.



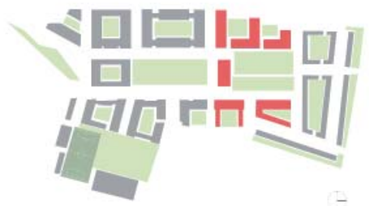


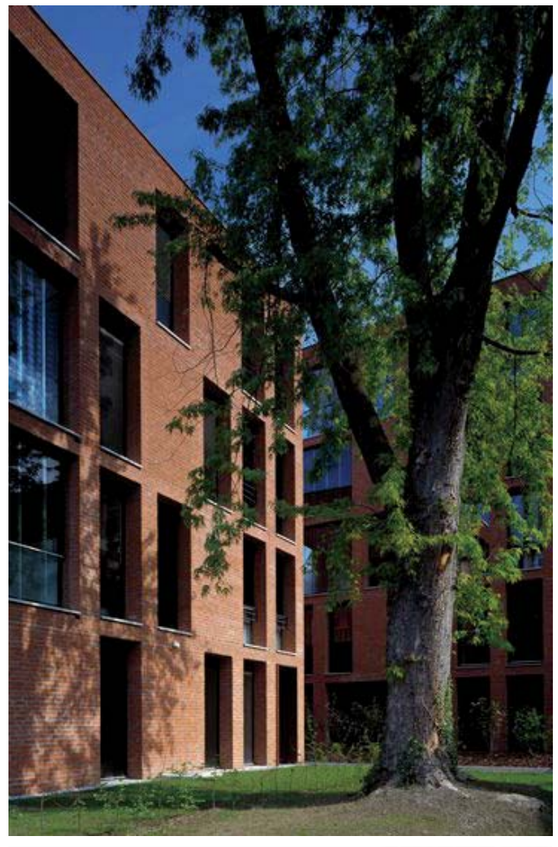
Building Elevations of consented scheme (Buildings C, D, E & F) with Red line depicting proposed increase to overall building height

9.0 | Character Areas & Materials

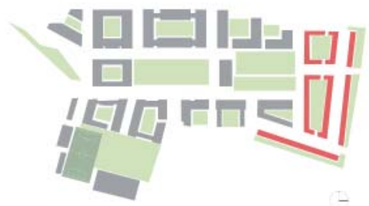
Character Areas: Introduction

New Brunswick Park (North)





Northern Homezones



The masterplan has been formulated to deliver a range of building scales, massing and typologies.

These typologies have been determined by the height and density principles of the masterplan, in conjunction with an acknowledgement that the landscape masterplan is determined by the arrangement of buildings around new public open spaces, of varying scales and feature.

Northern Homezones

The low rise 'northern homezones', on the top elevation of the site and immediately adjacent to existing off-site two/ three storey dwelling houses are to respond in a similar scale and strategy for open space provision. As these dwellings are positioned at a similar elevation to their off-site neighbours, their rooftops will match in level.

New Brunswick Park North

As the site falls away in elevation and moving southwards, the opportunity to create buildings of increased storey height, but at a consistent roof-elevation to the dwellings to the north of the site is presented. This area is a mid-rise transitional area and fronts onto a new public park entitled "New Brunswick Park North'. Buildings facing New Brunswick Park North are typically 4 to 6 levels in height.

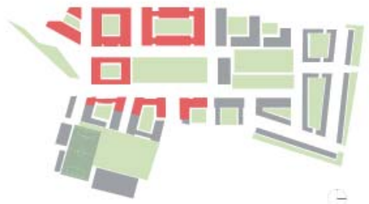
New Brunswick Park South

The lower level of the site, along the Railway frontage and extending to the southern site entrance and Oakleigh Road South is the area of the site identified as suitable for receiving the highest density of development. The area proposed to accommodate the highest density of development also fronts onto the largest new public open space in the masterplan, New Brunswick Park South.

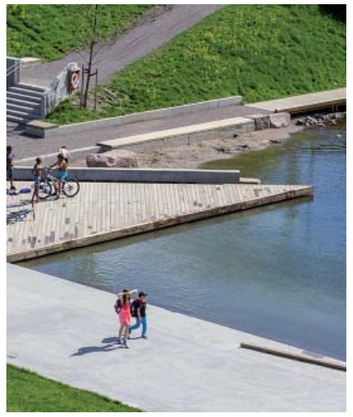
Buildings facing New Brunswick Park South are typically up to 13 levels in height. Local architectural expression to mark cor

Character Areas: Introduction

New Brunswick Park (South)



Brunswick Lakeside Park



ners or other feature areas in this portion of the masterplan are permitted.

New Brunswick Park South Mixed Use Building

A central mixed use building, placed between New Brunswick Park North and New Brunswick Park South, is proposed. This building requires particular architectural input and review, it is a building-in-the-round and houses ancillary uses to compliment the residential-led masterplan, including local retail, community & childcare services. The central mixed use building may extend to up to 11 levels.

The Avenues: Oakleigh Avenue

The building proposed at the entrance to the site at Oakleigh Road South is a building that will announce the new residential community to the wider local context. Existing mature trees at this entrance are to be retained and this building is to be substantially setback to facilitate their retention.

A modest increase in building height above the 8-level general maximum height is permitted for this building, up to 10 levels. The setting of this building as a marker element set behind tall and mature existing trees is to be exploited. The masterplan form suggests that the slender edge of this building be used to front with an elegant building proportion.

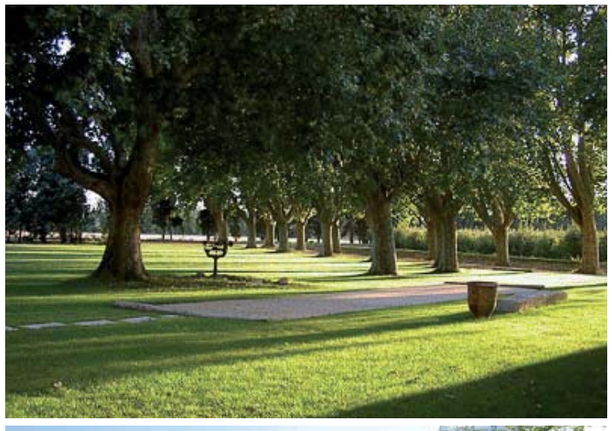
The base of this building is south facing and in conjunction with the substantial setback, a new public space is proposed at the building base, with a visitable use, such as café/ retail. building.

Brunswick Lakeside Park

The Character of Brunswick Lakeside Park is described in the Phase 1 Detail Planning Area, as a mature and verdant Parkland less formal than it's neighbour New Brunswick Park.

New Brunswick Park


Urbicus, Parc Francois Mitterand




Landscape precedent Images 'New Brunswick Park'


Glenn Howells Architects, Parkside Place


Baumschlager & Eberle Architects, Villa Menti

New Brunswick Park is an evolution of the Central Park proposed in the masterplan of June 25th. As outlined in this document, the resolution of GLA concerns regarding the quality and provision of flexible open space; along with the concern that awkward routes and an overly dense form of development was being proposed (particularly in the northern area) has been resolved by simply extending the reach of the central park. A majority of Phase areas now enjoy frontage to New Brunswick Park and the park is truly a central space that all residents can feel ownership off.

New Brunswick Park extends approximately 300m in length and the character of the space changes along its length. To the south, New Brunswick Park is predominantly flat, providing the opportunity for conventional informal activities such as play, ballsports and ambulant activity. To the north, New Brunswick Park rises steeply, contains a number of good quality trees (that have been identified for protection in this masterplan revision) and requires careful level management for vehicles and pedestrians, to offer safe and accessible inclines.

This masterplan revision proposes that the inclusion of the majority of masterplan phases with direct visibility of New Brunswick Park justifies the location of local retail services, community functions & childcare facilities in a mixed-use building of particular character within the Park.

DESIGN AND ACCESS STATEMENT

AUGUST 2021

ST ANDREW THE APOSTLE GREEK ORTHODOX SECONDARY SCHOOL

BARNET, LONDON

BOWMER + KIRKLAND

ares LANDSCAPE ARCHITECTS

curtins

couchperrywilkes engineering change

innovare

dpp PLANNING

STRIDE TREGLOWN ARCHITECTURE

Aerial Overview of Site

CONTENTS

1 EXECUTIVE SUMMARY

Aerial View of the building from the South-east

1 EXECUTIVE SUMMARY

1.1 Executive Summary

Bowmer & Kirkland (B&K) have been commissioned by the Department of Education (DfE) to develop a scheme for a new secondary school in the London Borough of Barnet. This Design and Access Statement supports the formal planning application submission and has been prepared by Stride Treglown Architects with input from other members of the project team, including Ares Landscape Architects, Structural & Civil Engineers Curtins and Service Engineers Couch Perry Wilkes. DPP Planning are the Planning Consultants and are leading the Planning process.

The site for the proposed St Andrew the Apostle Greek Orthodox Secondary School is part of the redevelopment of the North London Business Park site, which already has outline planning consent. The school is currently operating within converted office buildings in the business park, and has been doing so for the last 8 years. The new building will provide much needed, state of the art facilities for students aged 11-18 years, and will provide a total of 1050 places (750 places for years 7-11 and 300 places for Sixth Form). There will be 150 students per year group,with class sizes of 30 students.

The works associated with this application include:

- Construction of a Teaching Block, containing general and specialist teaching, performance and catering facilities, with a Multi Use Games Court on the roof.
- Construction of a Sports Block to contain sports facilities, planned to support Community Use.
- The provision of new trees and high quality soft landscaping, hard standing, games court areas, and external dining.
- Bicycle, visitor and staff car parking, servicing zone, and bin store.
- Basement car park for staff and community use
- New secure boundary fencing.
- Associated highways and access works.

St Andrew the Apostle School is a DfE approved free school by the Russell Education Trust (RET). RET is a Multi-Academy free school Trust established in 2010, establishing five free schools since. St Andrew the Apostle Greek Orthodox School is a co-educational Secondary Academy. The school is the first state-funded Greek Orthodox secondary school in Britain to be supported by the Greek Orthodox Church and the Russell Education Trust.

The school opened on the North London Business Park in converted office accommodation in September 2013 with their first cohort of year 7 students. The school was submitted as part of a wider hybrid planning application by the Comer Homes Group for the phased comprehensive redevelopment of the North London Business Park. This was to deliver a residential-led mixed use development comprising 360 units in five blocks reaching eight storeys, the school, and associated improvements to open space and transport infrastructure.

The proposed building will be a gateway building to the development. The building itself has a clear layout that is legible and easy to use, and maximises the quality and variety of external spaces. It builds on the development masterplan and neighbouring context; following the design guide for the development while creating a strong modern identity for itself that can be shared by all.

The proposals in this document have been guided by consultation with local residents, planning officers and the client's advisors. The design presented is intended to represent the sympathetic development of the site into a cohesive, modern school that enhances and celebrates it's unique character, and provides facilities the local community can utilise.

Subject to planning permission, the school will open in its permanent site for the September 2023 intake.

Proposed main entrance

Proposed View of Pupil Entrance

PROJECT TEAM

1.2 Project Team

Department for Education

The Department for Education (DfE) is responsible for children's services and education, including early years, schools, higher and further education policy, apprenticeships and wider skills in England. One of their roles is to provide the capital funding for the development of schools to offset identified shortfalls in pupil places. Through the DfE, Central Government funding has been secured to deliver St Andrew the Apostle Greek Orthodox Secondary School, a 1050 place secondary school for pupils aged 11-18, with approximately 100 staff (full time equivalent). As part of their school development programme, the DfE also set out a rigorous set of criteria for the performance of new schools, safeguarding optimal environmental standards, spatial criteria and material specifications.

RET
RUSSELL EDUCATION TRUST

The Russell Education Trust RET has worked in close partnership with parents, communities, and diocesan authorities to set up secondary schools. These schools are inclusive comprehensives with high academic standards, serving their locality and working as part of their local family of schools. Both RET, and the founding groups with whom they work, were firmly resolved that their schools would all be judged to be good or outstanding by OfSTED within two years of opening. This has been the case with all five schools inspected.

BOWMER + KIRKLAND

Bowmer & Kirkland are appointed to the DfE's Offsite construction Framework and are the contractor selected under this Framework to construct St Andrew the Apostle Secondary School. Bowmer + Kirkland are one of the UK's largest privately owned construction contractors and are active in most market sectors, including education. As main contractor for the scheme Bowmer + Kirkland will manage all aspects of the project to ensure the works are carried out safely, on time, to the right quality and with the least disruption possible to neighbours.

STRIDE TREGLOWN
ARCHITECTURE

Stride Treglown are a national, multi-disciplinary, architect lead practice with headquarters located in Bristol and other offices in London, Birmingham, Manchester, Plymouth and Truro. The practice is employee owned and consists of over 300 people across a variety of disciplines. Since 1953 Stride Treglown has achieved an unparalleled track record for delivering innovative, creative and sustainable architectural design solutions.

Stride Treglown has a breadth and depth of experience in education design, having delivered primary and secondary schools across the UK since the practice's inception. Over this time we have established an excellent reputation for delivering great design solutions supported by our reliable and pro-active team of designers and technicians. Stride Treglown believe in delivering school environments that support optimal teaching and learning whilst also providing uplifting pupil experiences and maximising pupil potential.

PROJECT TEAM

Client/Applicant

Department for Education
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Westminster
London
SW1P 3BT

Contractor

Bowmer and Kirkland Ltd
1230 Arlington Business Park
Theale, Reading
RG7 4SA

Architect

Stride Treglown
3 Cosser Street,
London
SE1 7BU

Structural & Civil Engineers

Curtins Consulting
56 The Ropewalk
Nottingham
NG1 5DW

Services Engineer

Couch Perry Wilkes
St Johns House
30 East Street
Leicester
LE1 6NB

Landscape Architect

Ares Landscape Architects
Unit 3.25 East London Works
London
E1 1DU

Planning Consultant

DPP Planning
66 Porchester Road
London
W2 6ET

Fire Engineer

Ashton Fire
Chipko, Parslows Hillock
Princes Risborough, Bucks.
HP27 0RJ

Acoustic Engineer

Buro Happold Ltd
17 Newman Street
London
W1T 1PD

Daylight Consultant

ARUP
30 Barkers Pool
Sheffield
S1 2HB

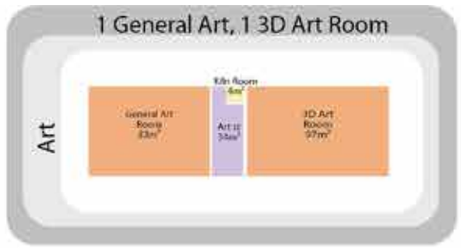
Transport Consultant

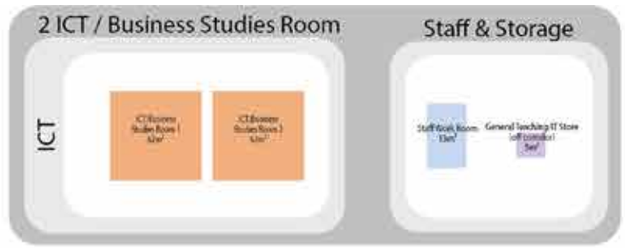
Velocity Transport Planning
Unit A, Taper Studios
The Leather Market
120 Weston Street
London
SE1 4GS

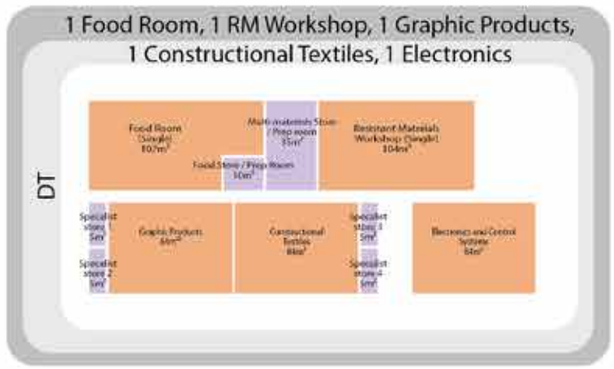
Manufacturer & Structural Engineer

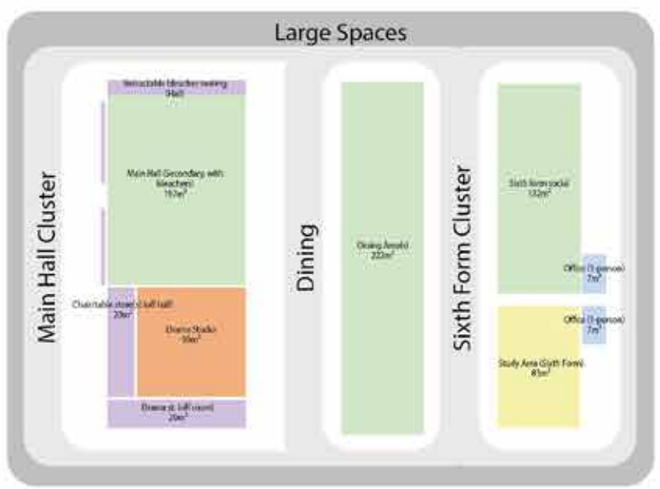
Innovaré Systems Ltd.
Unit 3, Siskin Parkway West
Middlemarch Business Park
Coventry
CV3 4PW

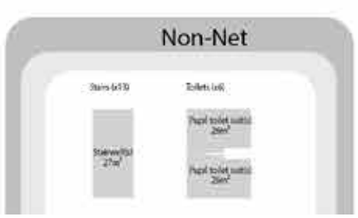
2 THE BRIEF











Initial Drawn Schedule of Accommodation

2 THE BRIEF

2.1 Core Brief and Vision (Overview)

The intention of the design is to establish a new permanent building and grounds for St Andrew the Apostle Secondary School within purpose-built accommodation, and to provide a modern teaching environment that accommodates and respects the specific attributes of the school and site. The school specific brief (SSB) was developed as part of a consultation and engagement process, which began in 2017, and evolved during the design period. This was considered alongside the outline consented scheme prepared by Plus Architects as part of Comer Group's Master plan, as well as the DfE's Schedule of Accommodation and Area Data Sheets, the Control Option, Building Regulations and Building Bulletins where relevant.

The briefing documents given to contractors and their Architects within the design development process comprise a suite of documents, the most significant of which is the Output Specification (OS), which sets out the DfE's requirements for new school buildings. The OS places a strong emphasis on the quality of the internal learning environment, particularly in terms of daylighting and ventilation in order to provide the best possible environment for learning.

2.2 St Andrew the Apostle Greek Orthodox School Educational Design Brief

The Russell Education Trust is partnership of five schools across the south of England. Multi-Academy Trusts (MAT) are regulated by the Secretary of State for Education. The main documents that set out how they operate is through the Articles of Association, which define their internal structure, and the Master Funding Agreement (MFA), which is the legal contract with the Secretary of State under which MATs run their schools. In addition, there are separate Supplemental Funding Agreements (SFAs) for each individual school.

The educational vision, curriculum and values for St Andrew the Apostle Secondary School are defined in the School Specific Brief to:

'Provide all students with the opportunity not just to achieve but to excel. Be broad and balanced, with a focus on the core subjects of English, mathematics and science, while ensuring that all students are encouraged to achieve in all National Curriculum subjects. The large majority of students take RE to GCSE level. A key part of our provision is an entitlement for all to develop their skills and interests in the arts and sport.

As well as the common curriculum there will be personalised curriculum pathways. All pathways will develop our students' critical thinking skills and empower them as citizens, future employees and individuals.

Social, moral, spiritual and cultural development will be embedded throughout the curriculum.

Engaging enrichment opportunities for all that are embedded in the classroom as well as beyond it.

Relevance to the wider world and application to the world of work.'

Key requirements identified by the School included (but not limited to):

- The Main Reception area should be light, welcoming and exude the ethos of the school.
- The main hall should be located close to the school entrance and near performance areas and dining, however the kitchen and dining area would not be visible from the main entrance.
- Location of the 6th Form should reflect the pupils' status in school
- The spread of offices on each floor should be linked to subject areas and the Senior Leadership Team should be distributed throughout the building.

The school will ultimately house 1050 students, together with all necessary associated car parking, access routes and hard and soft play areas. The school will expect to employ around 150 full-time equivalent teaching staff.

2.3 The Trust's Vision and Top 5 priorities for the design of the School

Throughout the Client Engagement Meeting process we established the Trust's vision and top 5 priorities for the design team to respond to when designing the School. These are set out below:

Vision

- Welcoming, warmth and character
- Desire for visitors and parents to know it is a faith school
- Space for contemplation
- Unique ethos, importance of robust curriculum and faith element
- Integral part of the community

Top 5 priorities

1. Openness and light, with classroom visibility.
2. Ability for spaces to be used by the community.
3. Reflect the robust curriculum and faith element within the entrance/as you come in.
4. Ability for external space to flow as the site is very constrained.
5. Support well rounded students, including sports and creative subjects to be equal.

3 DESIGN PROCESS

View of the new school from across the roundabout

3 DESIGN PROCESS

3.1 Site Location and Context

The proposed site for St Andrew the Apostle School is part of the redevelopment of the North London Business Park in Barnet, London. Surrounding the Business Park there is predominantly residential properties. The Business Park itself is to be redeveloped as a residential-led mixed use scheme. There is a railway line running north-west to south-east towards the rear of the redevelopment site, however this is some distance from the school site.
Southgate Cemetery entrance is opposite the school site, with a fairly busy, narrow road running between the two.

Wider context aerial with site highlighted

3 DESIGN PROCESS

Local context aerial view with boundary line

3 DESIGN PROCESS

1 /View from the entrance looking south along Brunswick Park Road


2 / View from the site entrance looking North on Brunswick Park Road


3 / View of the site from Brunwick Park Road


4 / Residential property on Brunwisk Park Road adjacent to south boundary of the site


5 / Southern boundary of site showing change in level.


6 / Existing lake


7 / Existing car park at south end of site showing level change

3 DESIGN PROCESS

Site Constraints and Opportunities Plan

3 DESIGN PROCESS

3.2 Site Analysis

Due to the redevelopment of the site, we have existing site features and proposed site features to take into consideration when undertaking the analysis. Extensive analysis of the site through research and technical surveys has been undertaken as part of the design process. This process has investigated issues relating to ecology, daylight, noise, air quality, and protected species present on site. Any relevant conditions or constraints that were put in place following these investigations have been considered in the design and where necessary will be secured by condition.

Levels

The topographic survey indicates that the existing site generally falls towards its most easterly extents, from a high point of approximately 72m above ordnance datum (AOD) at its north-western corner, to a low point of approximately 48m AOD near the south-east corner. The school site itself will be left level and remediated as part of the redevelopment works by Comer.

Access

The current pedestrian and vehicular site access is from Brunswick Park Road. The proposals include additional pedestrian access to the site. The vehicular access road off Brunswick Park Road will be altered as part of the redevelopment masterplan works, but will still provide access to the school site.

Ecology

An ecology report has been prepared for the masterplan development as part of the outline planning application. The conclusions of this are that the site was of poor conservation value due to the context of the development in a highly urban area and the dominance of buildings. The report recommends bat and bird boxes, as well as native planting and wildflower grassland mixes. Canadian Geese use the lake as a resting place on their migration, the relocation of the lake is not expected to cause issues with this.

Flooding

The site is within in 'Flood Zone 1 – Low Risk' from fluvial flooding. This means that the site located is not at risk of flooding from fluvial sources in up to the 1 in 100year return period flood (<0.1%). The site is located within 'Flood Zone 1 – Low Risk' and would therefore pass the Sequential Test, as there are no competing sites with a lower flood risk classification.

Lake and retention basin

The site has an existing lake, which is to be reconfigured as part of the scheme. The outline consented flood risk assessment shows that an area of freeboard drainage is required in order to contain water from the lake in the event of flooding. This area is within the school red line boundary and is a key consideration for the proposed site layout.

Existing buildings

The school is operating in converted office buildings on the site. These will be demolished, along with the other existing buildings as part of the overall site masterplan works.

Noise

Traffic noise from Brunswick Park Road is the most significant source of noise for the site. A Background Noise Assessment has been prepared by BuroHappold and has confirmed there to be no noise-related issues which cannot be readily mitigated, however, natural ventilation is not recommended due to the background noise on the site. It is recommended that the building will have mechanical ventilation to control noise break-in to within the internal ambient noise level criteria, although windows will be openable to allow occupants to control their own comfort and environment should they wish to.

Transport

There are two bus stops adjacent to the site; on Brunswick Park Road and Oakleigh Road South. Both are within 400m of the site along the road network. These bus stops provide access to the 34, 125, 251 and 382 bus services. These bus routes provide a comprehensive service to the surrounding areas of Barnet, Enfield and Haringey, whilst also connecting to other services providing routes to the rest of London. The bus services also provide access to the surrounding Underground and Train stations at Southgate, Arnos Grove and Totteridge and Whetstone.

Neighbouring Properties

Properties facing the school site along Bruswick Park Road will need to be considered in terms of the visual impact the school site will have on them. The closest property to the site is on the south-eastern corner on Brunswick Park Road. The rear gardens of the properties on Brunswick Crescent back onto the site.

3 DESIGN PROCESS

3.3 Review of Outline Consented Scheme

As part of the development masterplan, a design for the school was submitted and gained outline planning approval. The scheme included the main teaching block, with Multi-Use Games Area on the roof (due to the constrained site area), a 4G All Weather Pitch, a Sports block and separate changing block.

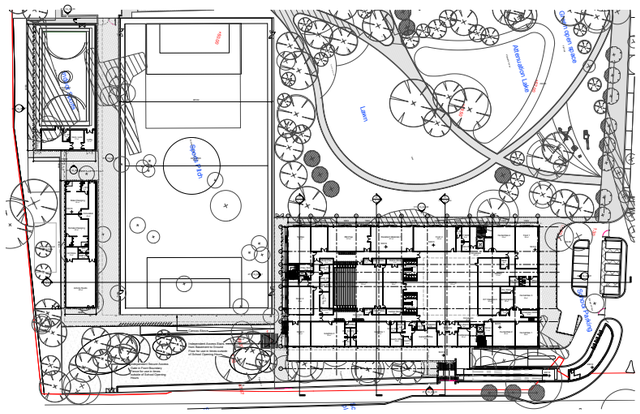
This scheme was approved in 2017, however it had been reviewed by the DfE and their Technical Advisors against the up to date DfE space standards and guidance. The scheme was found to be larger than required, and as such the plans were reviewed to create a "Control Scheme" which will be analysed in the next section.

The elevations from the Outline Consented Scheme were to be used as a starting point for the developed scheme.

The DfE have strict requirements that must be complied with which relate largely to the internal teaching environments, ensuring the optimum learning spaces for the students. These requirements relate to daylighting, ventilation and acoustics, as well as ensuring the correct fixed furniture and equipment can be provided in the classrooms.

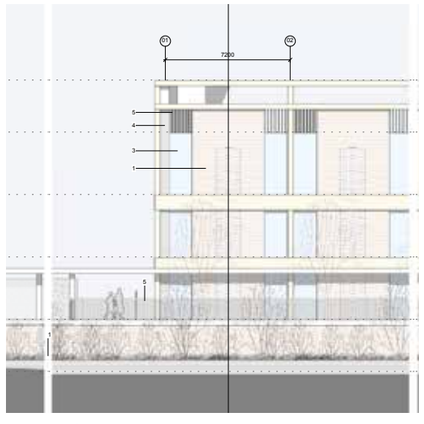
We reviewed the consented elevations against these requirements and made the following observations.

- Full height glazing provides little flexibility for FFE around perimeter of rooms (science/DT/Food etc).
- Horizontal banding reduces the head height of windows and limits daylight reaching the back of the classrooms. Our experience is that window head heights need to be 3.23m AFFL, the head height of the consented scheme is 2.7m AFFL.
- The windows to either side of classroom are not likely to pass daylight requirements. Our experience is that approx. 8.7m2 is needed to ensure compliance with DfE daylighting requirements. 7.5m2 of glazing is shown in outline scheme, with the additional glazing behind brick screen unlikely to provide enough to make up the shortfall.
- Ventilation strategy behind brick screen unlikely to work with acoustic requirements from road, or comply with the DfE requirements for incoming air to be no more than 5 degrees lower than the internal air temperature
- The setting out of the 7.2m bays works well for standard classrooms, however it will be difficult to ensure larger teaching spaces stack vertically in order to align the glazing as shown.

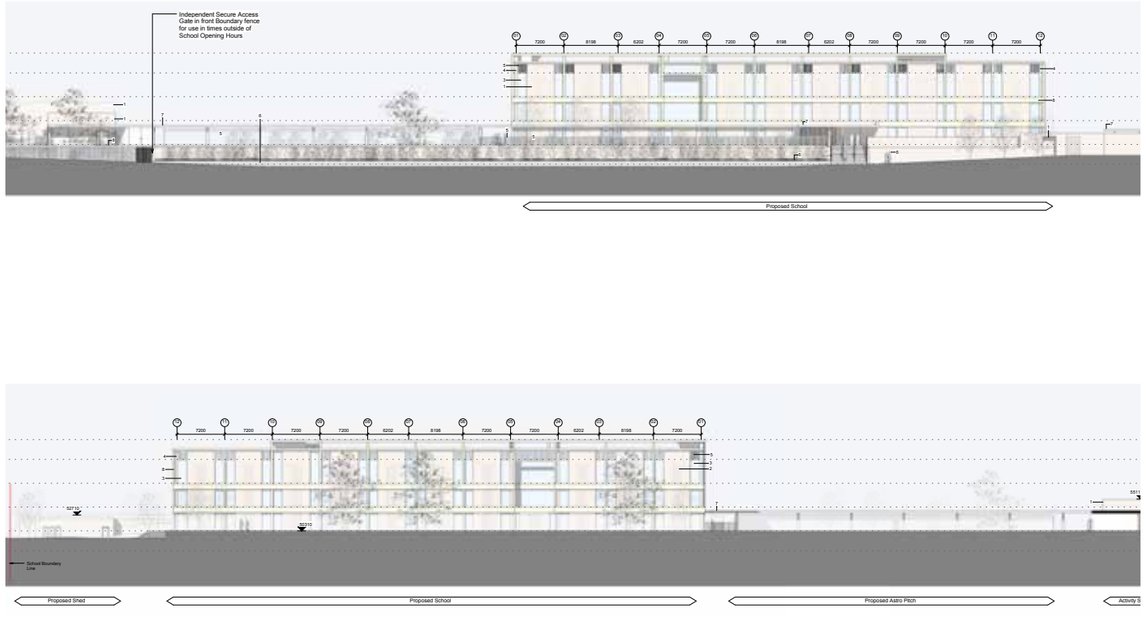


Site plan - Outline Consented Scheme

Comparison between Outline Consented Scheme and Control Option



Extract of elevation - Outline Consented Scheme



East and West Elevations - Outline Consented Scheme

3 DESIGN PROCESS

- The DAS for the outline scheme indicates windows that open inwards to the classrooms, behind brick screens. In our experience, these have caused health and safety concerns in the past due to students colliding with the open windows. In addition, these impact on what usable FFE can be installed around the perimeter of the classrooms.
- Another observation is that there appears to be no consideration to roof top PV panels or green roofs in order to comply with the London Plan, or the need for Air handling units or science lab fume cupboard extracts on the roof.

3.4 Review of Control Option

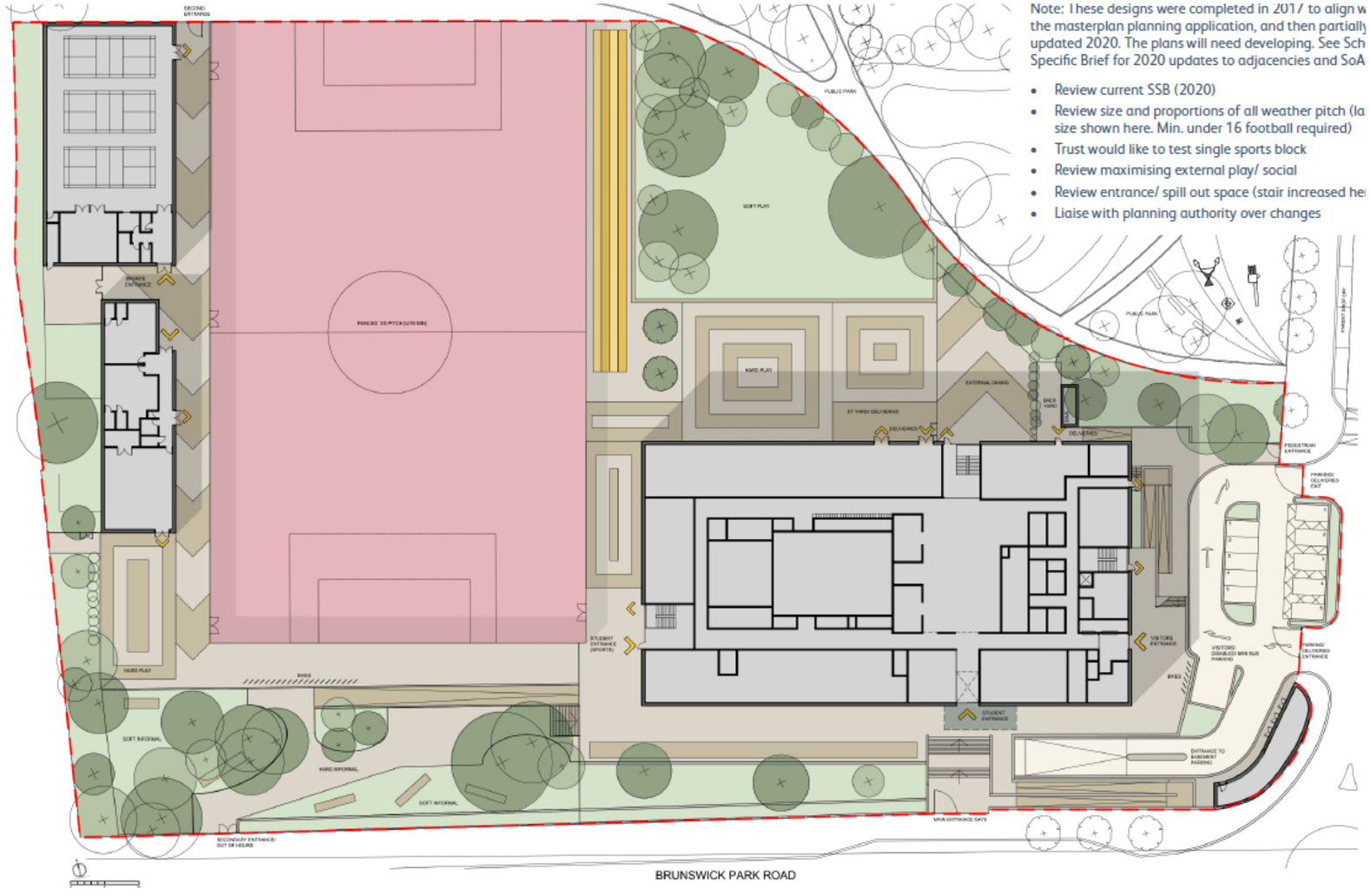
The control option was developed following the outline planning consent, which revised the overall size of the building and the internal schedule of accommodation. No elevations are produced for the control option. This plan provides a starting point for the design. During the first CEM meeting we undertook a review of the Control Option and identified the following Strengths and Weakness to the Trust:

Site Plan Strengths

- Main building in prominent location on the site
- Positioning of informal outdoor space adjacent to lake and trees – natural aspect
- Sports block could provide "buffer" to residential properties on the boundary
- View to lake from the main building
- Hard social space close to main block

Site Plan Weaknesses

- Community access - sports block and changing distance from car parking underground – how is access controlled.
- Ramp to underground car park to be reviewed – is it big enough?
- 4G and sports block very close to northern boundary
- 4G pitch drawn without run-offs
- Distance to walk to changing rooms and sports block from main building in bad weather.
- Exams in sports hall – queuing/limited WC provision
- Vehicular access and delivery area looks small
- Pupil entrance/exit directly onto bus stop
- Separate sports hall and changing rooms
- Not coordinated with required detention basin
- Long, narrow social spaces – disjointed and inflexible
- Convoluted pupil access



Control Option Site Plan

3 DESIGN PROCESS

Building Plan Strengths

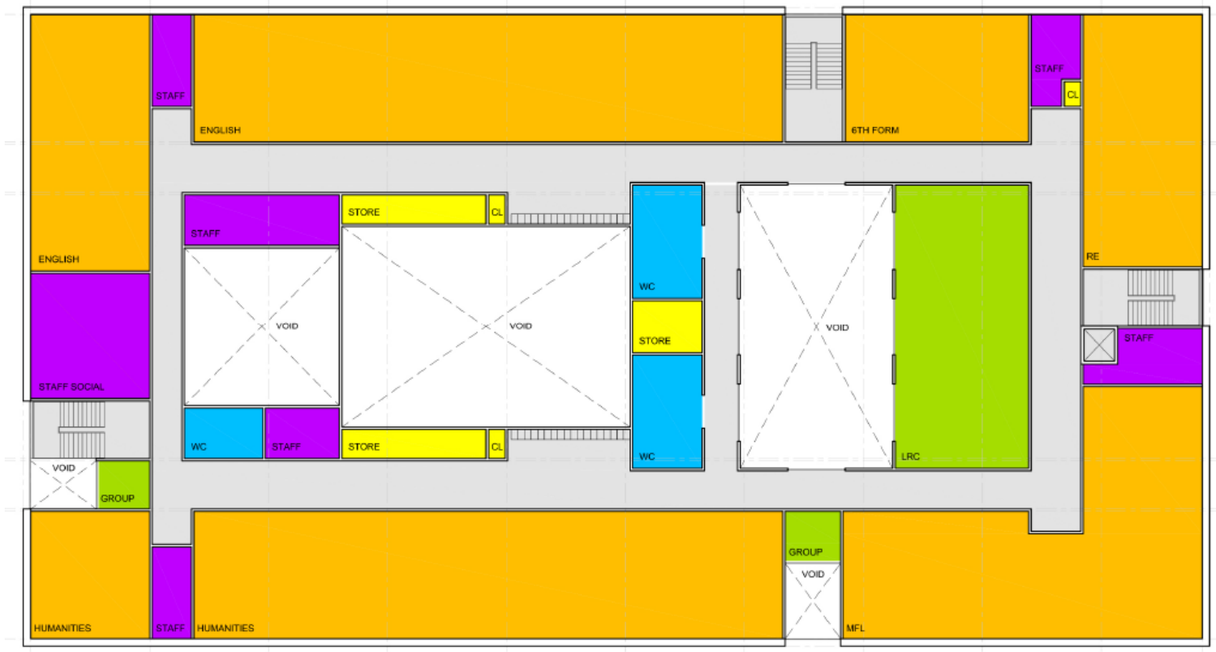
- Department zones seem to work in principle.
- RE/Classics showcase near entrance
- Access: Visitor and pupil entrance close to vehicular entrance. Pupil entrance into dining area.

Building Plan Weaknesses

- Pupil Entrance: No offices located adjacent for passive supervision.
- Plant room: in basement – no direct external access – would have to drive into car park
- Lift waiting area not allowed for, also corridor missing adjacent to stair on eastern boundary.
- SEN next to dining – may be noisy and no daylight
- Teaching spaces with borrowed or no daylight: LRC on First floor, IT/ Business and Art on second floor
- 6th form area shown doesn't look big enough for study and social
- Art not easily linked to DT as per School Specific Brief (1 floor between them)
- MUGA changing on external wall – takes up valuable light/window opportunity
- MUGA in centre of roof – better to one side for access and freeing up roof space

Following on from the assessment of the control option, the school specific brief was appraised and a series of preliminary options were developed.

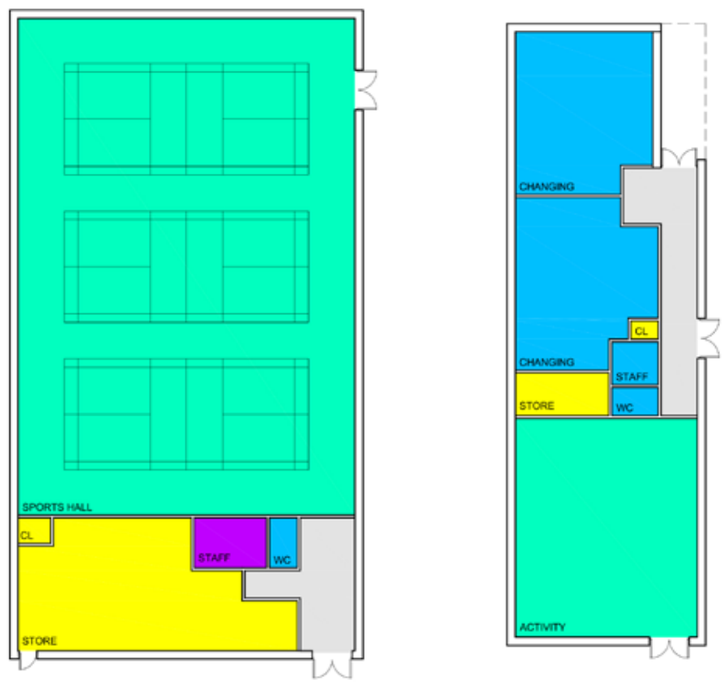
Ground Floor Plan - Control Option



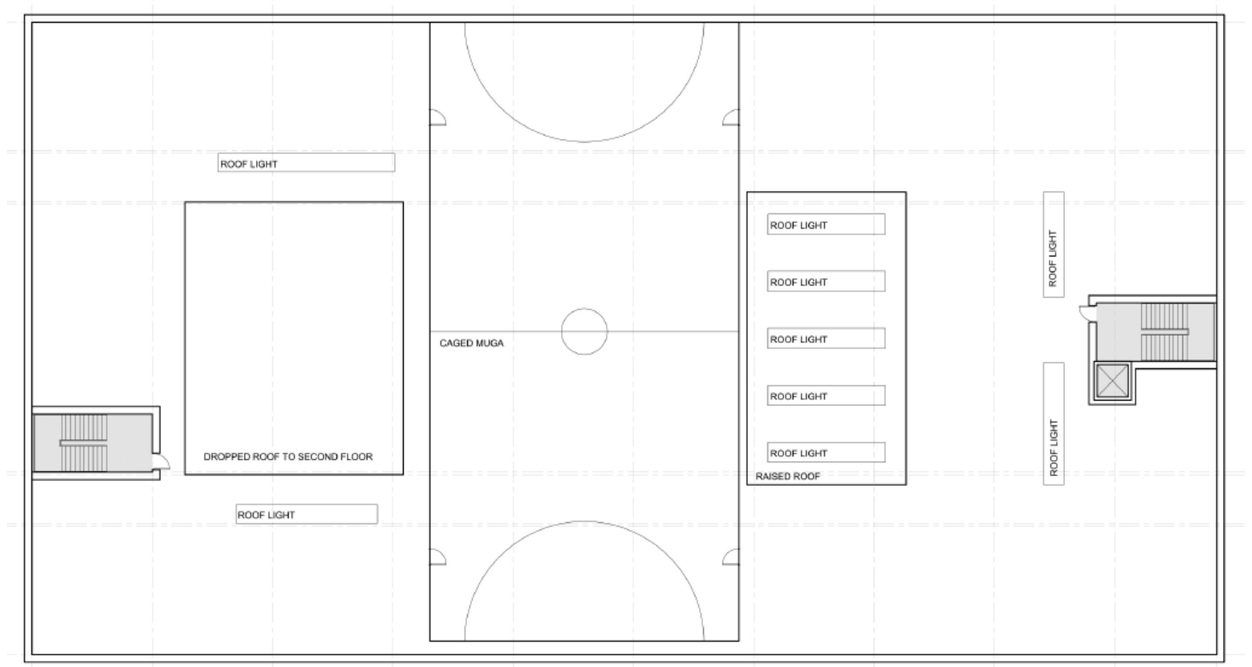
First Floor Plan - Control Option

3 DESIGN PROCESS

Second Floor Plan - Control Option



Sports block and changing block - Control Option



Roof Plan - Control Option

3 DESIGN PROCESS

3.5 Design Approach and Philosophy

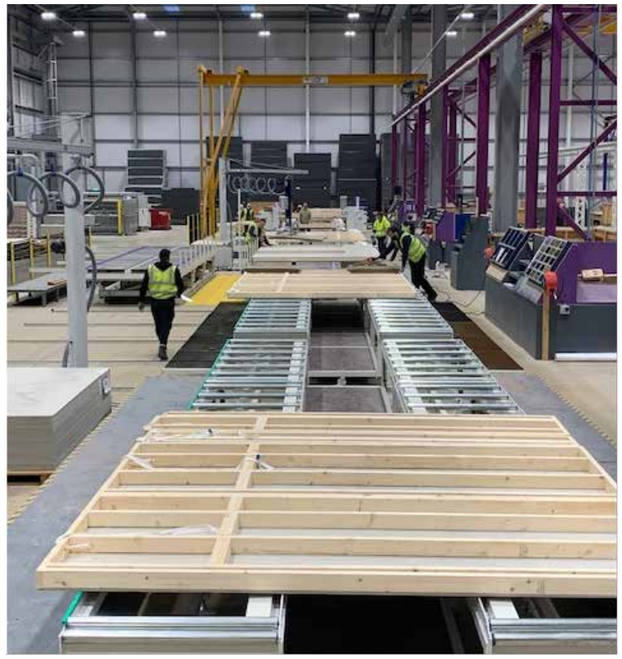
MMC Framework and Configure Offsite 3.0

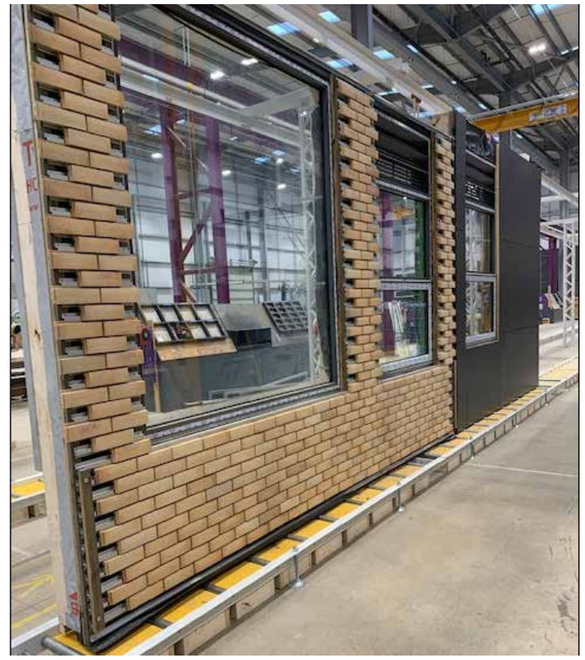
The aim of the Modern Methods of Construction (MMC) Framework is to drive greater efficiency, innovation and cost savings within DfE capital building programmes, improving ability to successfully procure and deliver new buildings within budget and at pace. The Framework objectives are to partner with a group of Framework Contractors to deliver right first time, predominantly Offsite manufactured schools, based upon flexible template designs that are efficient to produce and are value for money, making every pound spent count.

Lot 1 covers secondary schools and secondary blocks across England with an internal area of more than 6,000m2. It consists of five contractors and is worth £2 bn. B&K are one of the contractors appointed to this Framework and St Andrew the Apostle school is to be delivered on this Framework. This new Framework builds upon the work already undertaken in Component Primary and Secondary Frameworks and is designed to enable the industry to develop and innovate Offsite techniques as the industry moves towards DfMA (Design for Manufacture and Assembly) in the future. Core to this is the ongoing development of design standardisation.

Configure Offsite 3.0 is B&K's MMC solution that was born seven years ago and has continually evolved through their commitment to R&D and their established supply chain relationships. Configure Offsite is not constrained by the limitations of volumetric construction, taking the approach of 'one system fits all, not one size fits all'. Configure Offsite 3.0 is a development of B&K's seven year review of 20 offsite systems.

The structural solution developed by Innovare is a timber panelised SIP system made up of two products – I-FAST and I-SIP, developed by Innovare. The majority of the building elements will be made up of I-FAST panels. I-FAST stands for Fire safety, Acoustic performance, Structure and Thermal insulation, and is new generation of SIPs technology that delivers performance in all the above areas without any additional treatment or coating. Due to the requirements to include a rooftop MUGA and a basement car park, the structure of the building will be a steel frame with a SIPs I-FAST wrap to the external walls.





Photographs from Innovare's factory showing I-FAST panel construction

3 DESIGN PROCESS

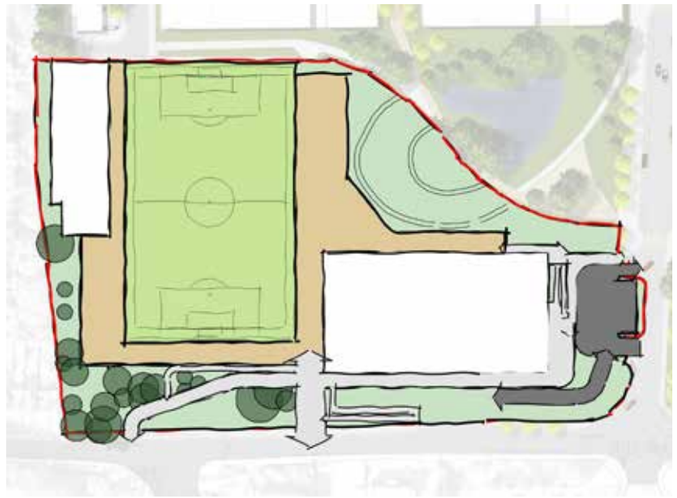
3.6 Initial Site Layout Options

The options appraisal study for St Andrew the Apostle began with reviewing possible alternative site layout options. The constrained site meant that the main building position on site was fixed, but there could be alternative options for the siting of the sports block, MUGA pitch and All Weather Pitch.

Following the site and control option analysis, and through discussions with the Trust and School, a preference was identified to combine the separate sports hall block and changing block into one building. A desire to locate the sports facilities as close to the main building as possible was also identified.

Option were produced that considered relocating the MUGA from the roof of the main building to the ground level, as well as relocating the sports buildings.

The site options presented on this page all feature the MUGA pitch on the roof of the teaching block. These were presented to the school during the first Client Engagement Meeting, along with the control option (which was option 1). Options for locating the MUGA on the ground were also presented and are on the next page.



Option 2 - Long Sports Block South

Option 3 - Long Sports Block North

Option 4 - Long Sports Block East

Option 5 - Square Sports Block

Option 6 - Square Sports Block Rotated

3 DESIGN PROCESS

All of the site layout options we presented included coordination with the freeboard retention basin.

Option 2 for both MUGA locations addresses the pupil access issues and avoids the entrance directly adjacent to the bus stop, but it was rejected due to the irregular informal hard play the layout offered, which provides little flexibility and low quality external areas for the students to use, and the sports block was felt to be too far from the main building

Option 3 for both MUGA locations also addresses the pupil entrance issue, and brings the sports block closer to the main building. However, the mass of the sports block splits the site, and while this could be positive as it creates courtyards which could be used for separate functions, the external space is then split which limits flexibility of use.

Option 4 for both MUGA locations improves the proximity of the sports block to the main building as well as providing a gathering space between the two buildings for pupils as they enter the site. The two buildings create buffer between the road and the play areas, improving security as well as providing a street frontage to the site.

Option 5 relies on the changing rooms for the MUGA pitch to be within the main building, This allows the sports block to have a more compact footprint on the site.

Option 2 - Long Sports Block South

Option 3 - Long Sports Block North

Option 4 - Long Sports Block East

Option 5 - Square Sports Block

Option 6 - Square Sports Block Rotated

3 DESIGN PROCESS

After review and discussion with the school and design team, the preferred site layout option was Option 4, retaining the MUGA on the roof of the main building.

This site layout was chosen because:

- Proximity of sports building to changing block reduces time spent outside for pupils in wet weather.
- Ease of use for lettings and community use due to proximity to car park and pedestrian access from the street.
- Access for pupils is away from the bus stop and away from the new roundabout and junction, improving safety.
- Gathering space between the two buildings that leads to the main informal play areas for pupil arrival.
- Improved street frontage and civic presence, allowing the sports block to be visible from the street.
- Allowed flexible outdoor spaces that flowed (one of the Trust's main priorities for the external areas).

3.7 Developed Building Design Options

The building form was restricted to a superblock in order to keep the footprint as compact as possible.

We tried and tested numerous internal layouts over the course of the Client Engagement Meetings to achieve the desired adjacencies for the Trust as well as create a welcoming and inspiring environment.

Examples of early stage plan layout options

3 DESIGN PROCESS

3.8 Building Design Principles

As part of the development masterplan, a design code was produced so that the separate phases of development would have a high quality, unified appearance. We referred to the principles within this document to develop the aesthetic for the scheme.
The initial building form and the preliminary elevation designs were developed through Client Engagement Meetings with the DfE and Trust. New schools delivered through the DfE focus on providing practical, robust and sensible designs within a reasonably constrained budget.

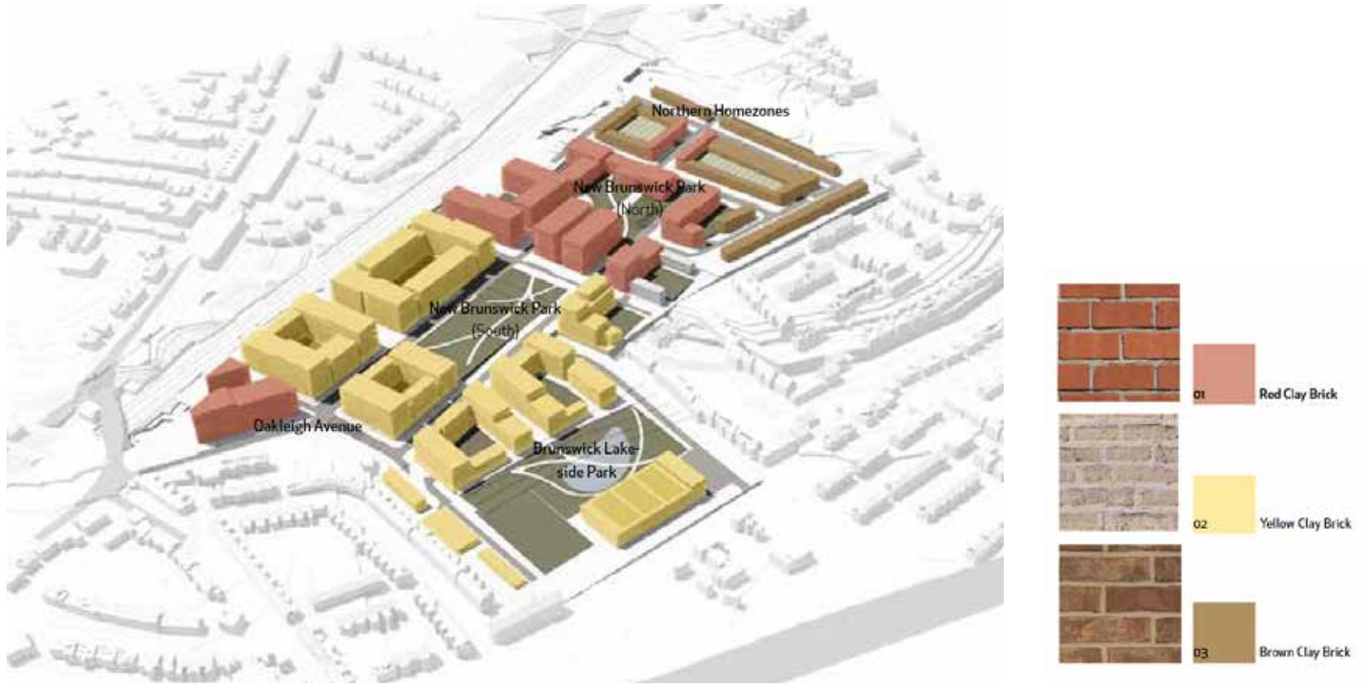
Elevation Design Principles

The starting point for the design of the elevations was to look at the design code principles for the masterplan development.

- Character Areas are identified in the masterplan, each with a different colour brick. Our site is within Brunswick Lakeside Park, which is to be Yellow clay brick
- Building Form - the document sets out that new buildings in the development are to be "Rectilinear and straight, laid out in a formal manner".
- "6.2.2 The plan form and elevational expression of buildings within the masterplan should seek to avoid long expanses of horizontal planes. Building forms that are vertically articulated are encouraged."
- Elevational treatments are to be simple, ordered and repetitive
- There is to be an expression of the roofscape.
- Materials are to be brick with no more than 2 additional materials for contrast/accents. The "primary facing material should be brick".
- "Accented bricks to provide relief across surfaces" with a "Variation in bonding"
- "Expression of structure"
- Windows are to be simple with a vertical aspect.

Identity

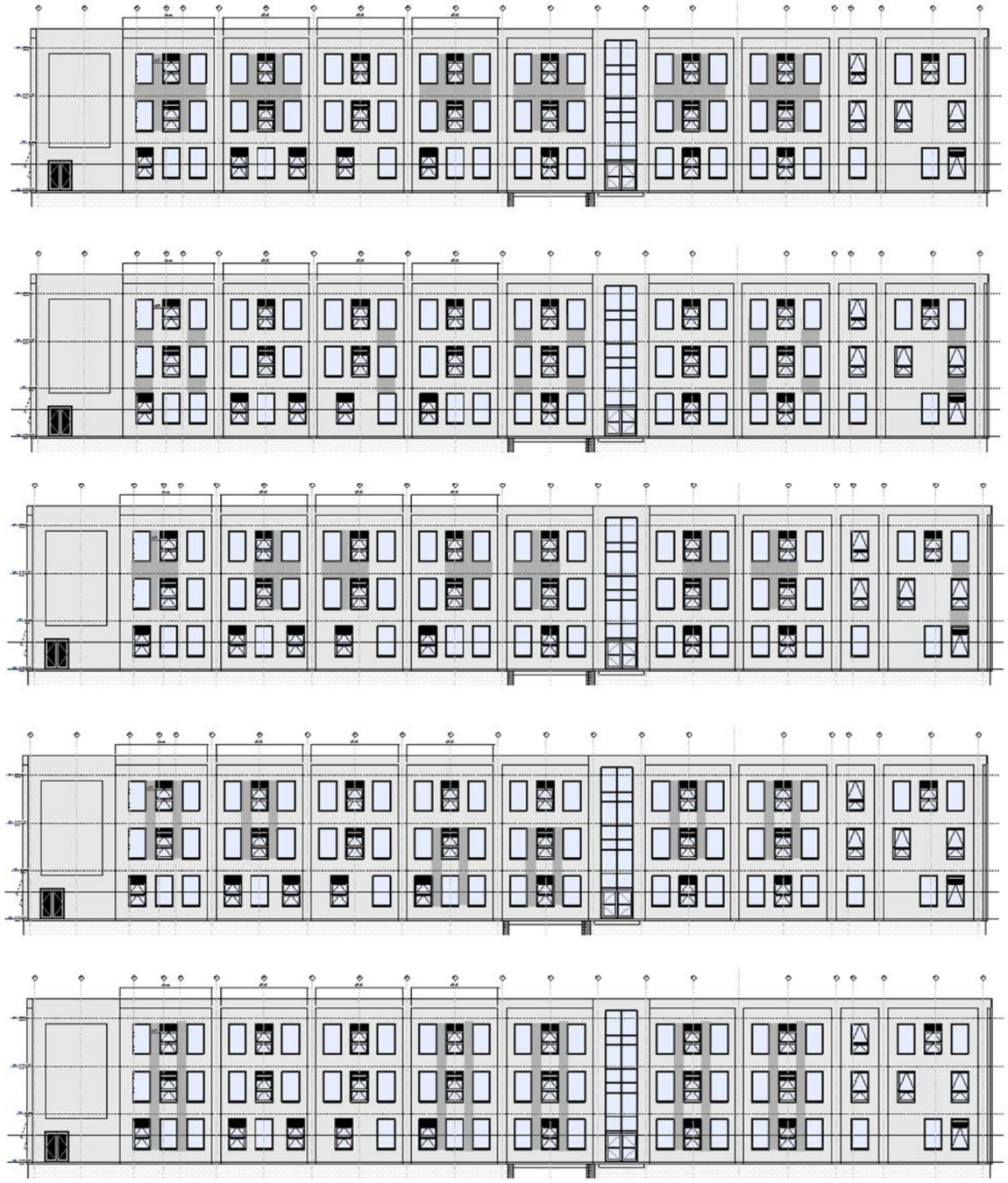
The development masterplan highlights St Andrew the Apostle School as being a gateway building into the site from Brunswick Park Road. The Trust wanted to building to reflect the school's ethos and faith element, as well as being a welcoming building.



Character Areas from the Design Principles Document

Extracts from the design principles document as examples of regular ordered windows

3 DESIGN PROCESS



Elevation studies looking at grouping of windows

Examples of brick bonding and expressed structure

Example of variation in brick bonding

3 DESIGN PROCESS

Consultation & Meeting Timeline	
Pre-Application Meeting	January 2021
Public Consultation Event	March 2021

3.9 Public Consultation

The project team have engaged with the local community on detailed proposals for St Andrew the Apostle permanent accommodation plans. The scope of the engagement exercise was to inform local residents and stakeholders about the plans and to seek their feedback.

The exercise complemented the consultations undertaken by other members of the project team who continue to liaise with statutory consultees through the planning application process. The Statement of Community Involvement will be submitted in support of the planning application and provides details of the engagement undertaken, analysis of community feedback and responses from the project team.

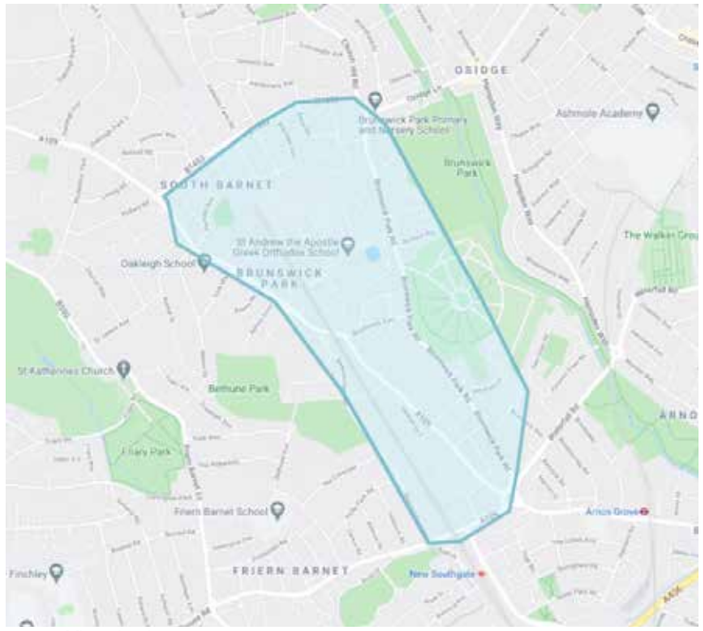
Our engagement activity included;

- Private webinar for school staff and governors
- Public webinar with opportunity to ask live questions
- A project website with flythrough animation
- Over 3000 flyers distributed
- Over 200 letters distributed to near neighbours
- Invitation emails to councillors, community stakeholders and local businesses
- Invitation emails to school parents/carers
- Project email address and telephone number
- An online feedback form and webinar poll

The key themes raised at the consultation webinar were:
Congestion - weekends; drop off and pick up; School travel plan
Access - School access routes (vehicles and pedestrian); onsite parking facilities; wider NLBP masterplan
Construction - construction hours, access and noise; offsite manufacturing process; project program.
Building - Windows and ventilation; sustainability, fabric first approach; Layout of fencing and roof top MUGA.

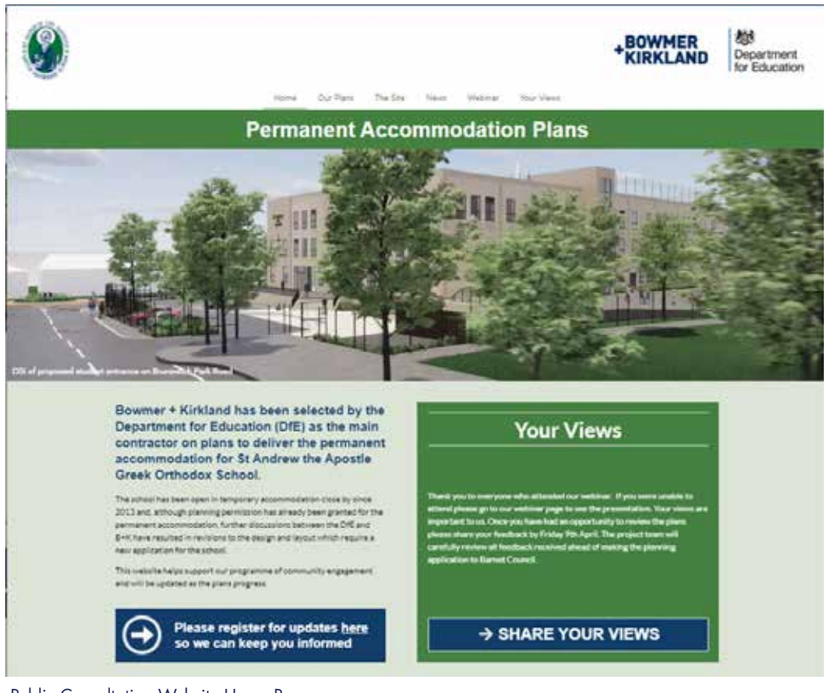
70 people attended the webinars
65% support the plans and 35% said they were not sure.

Public Consultation Flyer



Map of flyer distribution

Public Consultation Webinar Slides



Public Consultation Website Home Page

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Summary of the General Q&A session from the webinar

Do you have to be an Orthodox Greek to attend this school?
Information on the admissions policy is available on the school website here. Up to 50% of the places available will be based on a 'faith' criterion.

How is the school build being funded?
The school is being funded by the DfE with land provided as part of the Comer Homes Group development.

Why is a new school needed?
The school opened in temporary accommodation in 2013 within the North London Business Park (NLBP) and has limited access to adequate facilities occupying former office accommodation. The school will remain in its temporary location until completion of the new buildings.

Will there be opportunities for students to get involved in the project?
B+K will work with the school to use the rebuilding project as a learning tool for students, encouraging students to look at the many different career opportunities in construction.

When do you envisage works to start and foresee the works finishing?
B+K hope to start on site this summer, finishing in spring 2023.

Transport/Highways

What parking facilities are included?
Parking will be provided in a basement facility with 70 parking spaces (19 size restricted), 3 accessible spaces, 8 motorcycle spaces and 28 bike spaces. Visitor, minibus and disabled parking bays will be provided above ground, as will additional cycle storage for students. The school will update their Travel Plan to encourage sustainable travel to and from school.

The school has been in operation since 2013 so the impact that the school generates is already accommodated on the road network. The small proportion of students arriving by car will be dropped off along the new access road where 23 drop off/pick up spaces are proposed, preventing impact on local streets. There is a secondary pedestrian access gate to the school on this boundary for students.

What about congestion on Brunswick Park Road?
There is a proposal to upgrade the access junction to a mini-roundabout as part of the approved hybrid planning application for the North London Brunswick Park. Modelling work was produced and submitted to justify that the proposed junction arrangement can operate without queues and delays. This modelling work took into consideration the school operation.

What public transport options will students and staff have?
The school can be reach via London Underground at Arnos Grove station (Piccadilly Line) and via Overground services at New Southgate. Both stations are within a mile and buses 34, 251, 184, 125 and 382 stop 12-15 minutes' walk from main site entrance

Layout

What are the key changes to the plans from the earlier application?
The new plans include;
- A 4G pitch rather than a 3G one.
- The reorientation of the sports facilities

Does the new school overlook our homes?
The school has been design to consider privacy of the Edwardian terraced properties on Brunswick Park Road and is set back from the street.

What is being done to minimise the noise from the school?
A Noise Impact Assessment will be undertaken to ensure all proposals meet requirements. The buildings and vegetation will act as a buffer to noise from the 4G sports pitch and outside areas.

What will happen to the pond on the site?
The school is set back from Brunswick Park Road, covering the area of the existing pond. The pond like much of the landscaped area on the Business Park was built in 1981. Recent biodiversity surveys indicate the site's ecology value to be limited. The school site will include an area of soft landscaping and trees, in addition the Comer Homes wider masterplan will create landscape corridors and mini-parks across the site.

Will there be landscaping to reduce visibility of the school buildings from our properties?
The mature vegetation buffer will be maintained with additional planting and landscaping throughout the site.

Will surface drainage be considered?
A Surface Water Assessment will be carried out and the buildings will have SuDS (Sustainable Drainage Systems) designed to both manage the flood and pollution risks resulting from urban runoff and to contribute to environmental enhancement.

Design

Do the plans involve an increase in student numbers?
St Andrew the Apostle is a 5-form entry school from years 7-11 with a sixth form. The plans are for the same student capacity.

What height are the new school buildings?
The main school building is 3-storeys with the addition of a service parapet and a securely fenced Multi Use Games Area (MUGA), lift shaft and roof lights located on the roof. The sports centre is 2-storeys with a service parapet for maintenance access only.

What measures are you taking to ensure the building is sustainable through its lifecycle?
The new buildings will be constructed to meet government specifications, B+K use a 'Modern Methods of Construction' principle' which ensures the fabric, heating, ventilation, water and lighting systems are designed to be energy efficient. The London Plan emphasises that development proposals should make a contribution to minimising carbon dioxide emissions in conjunction with the energy hierarchy. Development should demonstrate how it is Lean, Clean and Green through an Energy Statement.

Are there lifts in the main building?
Yes, there is a lift in the central area.

What are the toilet and staff room arrangements?
The webinar slides showing each floor layout of the new buildings are provided on the website and show where the toilets and staff facilities are situated.

Sports facilities

What will the opening and closing times be for the new facilities?
The school will set out a community use agreement for use of their facilities. These would typically be until 9.30pm Mon-Fri and 9am-6pm on Saturdays and Sundays, but will vary depending on the facility e.g. 4G pitch may have different hours of use to the internal sports centre. In addition a Noise Impact Assessment will be undertaken.

Will the Sports facilities be managed by the school?
Yes, the school will set out a community use agreement for their facilities.

Construction

How will this effect the pupils while work is being undertaken on site?
B+K has extensive experience of managing sites with near neighbours. A complex phased programme of construction will carefully consider the local community and the nearby school. Traffic and construction management plans will be in place. Deliveries and vehicle movements will be programmed to minimise disruption to the neighbouring area. Progress updates will be shared with neighbours and the school community.

Where will construction traffic access?
Construction traffic will access the site via secure gates on East Drive, off Brunswick Park Avenue with a secondary exit connecting to Oakleigh Road South. Traffic and construction management plans will be in place. Deliveries and vehicle movements will be programmed to minimise disruption to the neighbouring area.

Will construction works take place at the weekend?
Construction will take place in accordance with all regulations and as determined by conditions agreed with the Council most likely including some Saturday mornings.

What measures are being taken to minimise construction noise for local residents?
B+K will work with the Council to ensure noise mitigation measures are established and to ensure that air quality (dust management) plans are put in place. The offsite manufacturing process will reduce the noise created by construction activities.

Design development after the Public Consultation

In response to the comments received during the public consultation, a review of the scheme was undertaken and amendments made improve the design. This included:

Access Consideration
Access around the school was reviewed, resulting in the building moving over by 1 metre to allow improvements to the vehicular and pedestrian access to the site, and ensuring coordination with the wider masterplan scheme.

Congestion
Residents made comments regarding potential congestion at peak times around the site entrance and junction with Brunswick Park Road. The strategy was reviewed with the wider masterplan design team and drop off bays agreed for school use during the start and end of the school day, resulting in updates to the Transport Assessment and Travel Plan with further clarification on the strategy.

4

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3D view of South Elevation

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View of the Dining Space

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4.1 Use and Amount

The proposal is for the construction of a new Teaching Block, Sports Block and associated hard & soft landscaping, car parking and infrastructure on the site to function as the complete St Andrew the Apostle Secondary School - a Secondary, School managed by the Russell Education Trust, designed to accommodate 1050 students aged 11-18. There will be 150 students per year group, with class sizes of 30 students, and approximately 150 full-time equivalent staff. The total site area of approximately 2.8 hectares will accommodate the entire school; buildings, parking, All Weather Pitch and informal external play areas.

The whole of the Sports Block as well as some areas within the school, including the dining space, main hall and ancillary spaces, will be accessible to the local community, offering excellent opportunities to gain improved access to sports facilities and performance spaces. The All Weather Pitch and the rooftop MUGA pitch will also be available for the community to use. The Use Class of the development is F1(a) Provision of Education

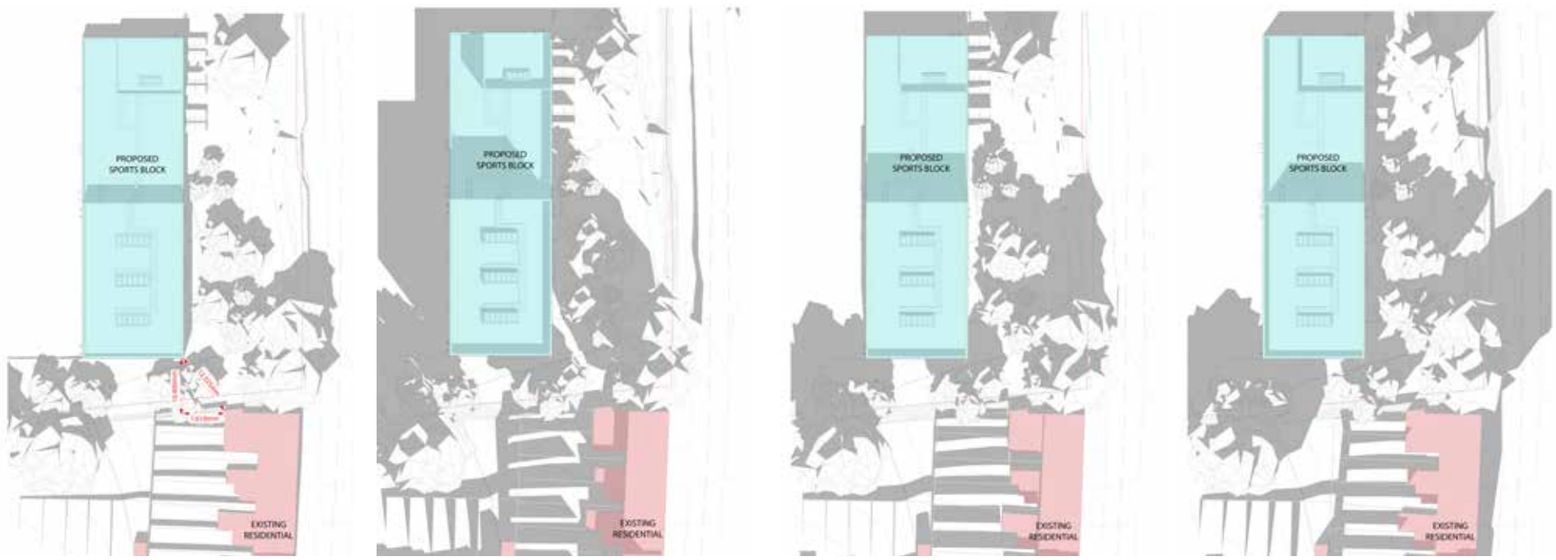
4.2 Massing

The proposed massing works with the site opportunities and constraints, as well as providing all the accommodation required of a 1050-place secondary school. The shape and size of the site resulted in the building being positioned on the northern end of the site, parallel to the road on the eastern boundary. The proposed main teaching block will be 3 storey, which is in line with the development masterplan guidance. The sports block has a maximum height of 10.4m, which houses the main sports hall. This is connected to the activity studio which has a overall height of 6.9m by a lower single storey element of changing rooms. The varying roof heights create a pavilion feel and reduce the mass of the building when viewed from the street.

The form of the building has been developed to reflect the need to achieve an efficient footprint, maximise the space available for external play areas and create a civic street presence.

The design team were mindful of the impact the sports block might have on the neighbouring properties. The diagrams show the distances the corner of the sports block is from the nearest property, and show a shadow study taken at different times during a spring day. The sports block sits to the north of the nearest property so the building will not cast a shadow onto the garden or house and the mature trees between the buildings will screen the sports block from view.

Illustrative view showing proposal in context



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4.3 Building Layout

The main block teaching accommodation is arranged as a 'Superblock' design, with teaching spaces around the perimeter, social 'heart' spaces in the centre. The Sports Block is a separate building to the south of the Teaching Block. The sport block contains a 3 court sports hall, activity studio and changing facilities.
The internal arrangements are detailed later in the document (page 34). As an overview, internal building layout responded to the initial adjacency requirements set out by the Trust in the School Specific Brief.

These were to have the ground floor comprising:

- A welcoming reception/admin area and conference/meeting room with visitors' toilets
- Main Hall and Dining Hall as separate spaces
- Drama / Music and DT related specialist facilities possibly with Art in the same area.
- Teaching classrooms for showcase RE & Humanities teaching.

First floor comprising:

- SEN and 6th Form centred around the Learning Resource Centre.
- 6th Form Social and Study Room to be separated by 6th Form office space and meeting space to enable passive supervision.
- Bulk of general classrooms with each subject grouped together.
- Staff room (social space and separate workspace) overlooking external play areas.
- LRC to contain full ICT teaching space

Second Floor:

- Maths, Science and Computer Science on same floor.
- Science labs with Prep Rooms in close- proximity to labs.

These initial adjacencies were reviewed and developed over the course of the Engagement Meetings in various iterations. The final plans resulted in the performing arts, music, DT and showcase humanities/RE classrooms, along with the admin and front of house facilities on the ground floor. The ground floor also features a worship and contemplation space to reflect the faith element of the school. The first floor comprises the LRC, SEN facilities, English, MFL, Art and staff room as well as the heads office suite and meeting rooms.
The second floor comprises the Maths, Science and ICT departments, as well as the 6th form area.

Aerial View from Northeast showing proposed massing

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4.4 Interiors

The Trusts aspirations for the internal environment were those of openness and light, and for the faith element to be communicated, as well as reflecting the robust curriculum.
The ability to passively supervise corridors and other spaces around the school using internal glazing was a high priority for the Trust, this helps with ensuring light gets into the internal spaces.

4.5 Circulation

The superblock design allows internal circulation to be a continuous loop around the school. This is optimum for reducing the potential for unsupervised anti-social behaviour, as there are no dead end corridors or isolated corners which are unsupervised.
The corridors are a simple circuit which is easy to navigate and assists in way finding. There are 3 main stair cores to provide access to upper floors, with a 4th more open stair leading to the upper floors, which is lit from above by a long rooflight and is visible from the main entrance.

The southern staircase provides access from the basement car park, and will also provide access to the sports block for the community is they are parking in the basement. The passenger lift is located in the south stair in order to provide vertical access for those who need it. The lift will be access controlled for security and the south stair core itself can be locked off from the rest of the school to allow for out of hours use without the risk of unauthorised access to the rest of the school. The south stair also has a door on the ground floor which will be access controlled to prevent pupils going down to the basement car park.

4.6 Adaptability

We recognise that like every educational establishment, the new St Andrew The Apostle School will have changing needs over time. There will be a requirement for the spaces to be adaptable within the longer term. The new school building has been designed to be simple, coherent and adaptable, both now and for future evolving education needs. In-built flexibility is provided in the building in a variety of ways:

- The steel frame internal structure allows for the internal partitions to be non-loadbearing so the majority of partitions can be reconfigured easily and quickly if required.

Proposed staircase with rooflights above

Dining hall view from staff office for supervision

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- Teaching areas are arranged in a standard width band on a grid around the main circulation "circuit", which allows internal walls to move to create different sized teaching spaces in the future if required. This also allows a standard approach to daylighting and windows to be used.
- The use of acoustic rafts and hanging light fittings within teaching spaces means that wall areas are left clear for displays and acoustic wall panels which can become inefficient over time (due to dust or being painted) are avoided.
- The ventilation bulkhead/raft arrangements are positioned to allow them to be retained, even if the partition layout were to change. The local heat recovery unit modulates CO2 and temperature, allowing the unit to increase/decrease ventilation rates to ensure the internal environment is always pleasant without wasting energy, even if the occupancy level altered within that zone. The variable speed controls will also ensure that only the fresh air that is needed is provided to the space. If occupancy levels were to drop in a future arrangement, the automatic ventilation controls will adjust to suit without occupant input. Each heat recovery unit can be individually controlled and therefore could be easily enabled/ disabled should it not be required under a certain configuration, or to suit the out-of-hours strategy which may also vary with time.
- The luminaires are perpendicular to the fenestration to allow partitions to be relocated without the need to move the suspended luminaries in the majority of arrangements. The artificial lighting control system utilises Lighting Distribution Units (plug-n-play) to allow the luminaires to be easily reconfigured with minimal alteration to switching circuits.
- Power and data shall be mounted on wall mounted DADO rails to allow easy removal and reconfiguration.
- Internal lock down has been considered to allow a limited part of the building to be opened up for easy security and control of out of hours community use. For example, toilet areas are still accessible from the main hall out of hours. Please see subsequent pages for Access Strategy drawings.

4.7 Design Quality

In addition to the design responding to the Schools' vision and the DfE requirements, the design also enshrines the principles identified in the CABE guidelines for a well designed school. We have reviewed and tested our proposals against the following:
ten CABE points:

- A high-quality design that inspires us to learn
- A sustainable approach to design, construction and environmental servicing
- Good use of the site, balancing the needs of pedestrians, cyclists and cars and enhancing the school's presence in the community
- Buildings and grounds that are welcoming while providing adequate security
- Good organisation of spaces in plan and section, easily legible and fully accessible
- Internal spaces that are well proportioned, fit for purpose
- Flexible design to allow for short and long term change of use
- Good environmental conditions throughout including natural light and ventilation.
- Well-designed external spaces offering a variety of different settings.
- A simple palette of attractive materials, durable and easily maintained.

Proposed Learning Resource Centre

Main hall being used for an Evening Performance

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4.8 Floor Plans

Ground Floor Plan

Visitors will approach the building from the north main entrance. The general office with its open, welcoming reception area includes a visitors WC and an interview room. This area is secure and only approved visitors will be permitted into main school accompanied by a staff member. Once within the secure line of the school the open staircase with its natural light flooding in from above allows access to the upper floors. The worship and contemplations space, or Chapel is located adjacent to the main entrance. This room has glazed screens either side of the internal door, with a large area of curtain wall to the external face, allowing views and light into the main circulation space after the reception.

The desire for there to be showcase classrooms for RE and humanities on the ground floor has been realised by the location of 4 general classrooms immediately adjacent to the chapel and the general office.

The performing arts department is also on the ground floor, this includes the main hall, drama studio and music rooms. The main hall is conveniently located close to the main entrance for performances and community events. The dining hall has a double height atrium with rooflights above which allow daylight into the space. The kitchen is located on the western side of the building. Early discussions with the Trust were had regarding servicing the kitchen for deliveries. The vehicular access to this site is fairly restricted, so the natural place for the kitchen would have been in the north west corner of the building. However, the Trust's desire for the dining hall to be away from the main visitor entrance, and closer to the student entrance and external play spaces was a higher priority and it was felt that deliveries and refuse would be easily managed by kitchen staff.

The DT department is also located on the ground floor. The food tech room is opposite the dining and kitchen so that students could practice a service if needed. The Resistant Materials workshop is on the western side of the building adjacent to the kitchen. There is an external door to the materials store so that deliveries of large materials can be easily taken.

Pupils will predominantly enter the building from the south stair well. They immediately come into the dining area which is supervised by strategically places staff offices and work rooms.

The plant room is located on the south eastern corner of the building, this is to ensure that the service routes are as short as possible to minimise the need for long runs of pipework across the site. The toilet facilities are located centrally in the plan, so they are easily accessible from the large spaces. The toilets are stacked up vertically on the other floors for efficient servicing and ease of wayfinding.

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First Floor Plan

The first floor of the Teaching Block consists mostly of general teaching classrooms, located around the perimeter to achieve optimum natural daylighting. The English department, Modern Foreign Languages department, Art classrooms, and the remaining humanities classrooms are on this floor. The head teachers office suite including meeting room are located in the north east corner, allowing good visibility to visitor and the main entrance, and easy access to the main entrance via the central staircase, while giving the head teacher privacy.

The staff social room is located in the south west corner, with windows facing out over the play areas to the west and south to aid in passive supervision of the external areas.

The LRC is centrally located with the English classrooms surrounding it. The SEN cluster of rooms is located next to the LRC in a quiet area of the school, but still occupying a central location.

Toilets are stacked across floors, with the main Toilet Block consistently located in this position to aid wayfinding.

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Second Floor Plan

The second floor of the main teaching block comprises science, maths and ICT departments. The location of science on the top floor is optimal due to the requirements for servicing and ventilation extract. The science rooms are served by one consolidated science prep space in the centre of the plan. The sixth form area is located in the south west corner of the building, this reflects the Trust desire to have the sixth form area separate from the rest of the school which helps to foster a sense of maturity and prepare them for moving on into further or higher education. The sixth form areas have views over the play areas to the south and west.

Dropped lightwells are provided in the centre of the plan above the hall and dining space to provide roof lighting, daylight into corridors and to allow a hidden area for the location of rooftop plant. The main plant room is also located in the centre of the plan and has access directly out onto this roof. Once again toilets are located in the same position.

The south and west stairs provide access to the roof, to access the roof top MUGA and for maintenance access to the plant equipment and PV panels also on the roof. The route to the MUGA from the stairs is fenced in to prevent students accessing any plant equipment.

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Sports Block Plan

The Sport Block has a simple, single-storey plan to facilitate both pupil and community use of the facilities and aid wayfinding. The form of the building was to be as narrow as possible to maximise the external play spaces to the west. The main entrance to the Sport Block is via the west elevation there is an office for bookings as well as for PE staff to use. The changing rooms are located centrally in the plan. One of the changing rooms has an external door for ease of access from the pitch, and to assist with access if there are visiting teams. The activity studio looks back towards the main building with windows in the north elevation and roof lights above to get light into the back of the space. The sports hall itself has rooflights over to provide natural light into the space will reducing glare. This is a standard approach to light sports halls from above so glare from sunlight does not affect players within.
Store rooms are located within the building, as well as staff and accessible changing rooms. There is a secure exam store located within the building for use when exams take place in the sports hall.

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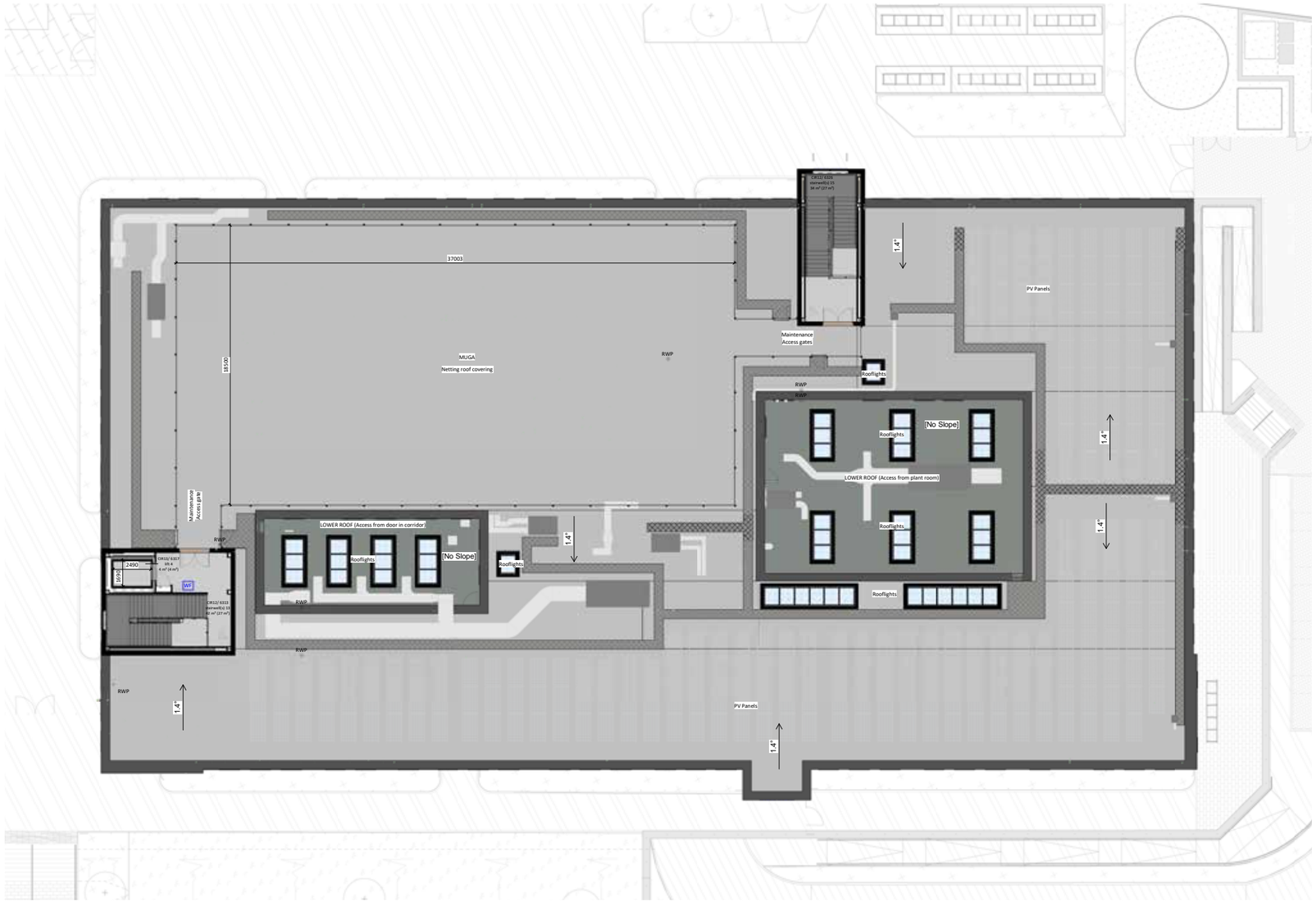
Teaching Block Roof Plan

The teaching block roof includes the Multi-Use Games Area, photo-voltaic panels and roof plant equipment such as ductwork and extract flues.

The MUGA pitch is located in the south west corner of the building. On the outline planning consent, the MUGA is located in the centre of the plan on the roof. Positioning the pitch on the south west corner, pulls it back from the main road, so less visible from the street and provides more opportunity for roof lights over the key central spaces in the superblock, like the main hall and dining area. The MUGA position had to be carefully considered due to the structural requirements and to ensure that heavily serviced rooms, such as the plant room and certain science labs had ways in which to extract from the roof or via light wells.

In order to comply with the London Plan, a number of PV panels are required to the roof. These cover a large area so access for pupils to the MUGA pitch is via fenced paths to prevent access to the PVs.

Considerations were made to the viability of providing green roofs on this scheme. The amount of PV panels that are required, along with the required access and maintenance routes, cover the majority of the remaining roof area which is not used for the MUGA pitch or used for rooflight, plant equipment, duct work and associated maintenance and access walkways. As demonstrated by the plans opposite, the roof is fully covered leaving no space for a green roof.



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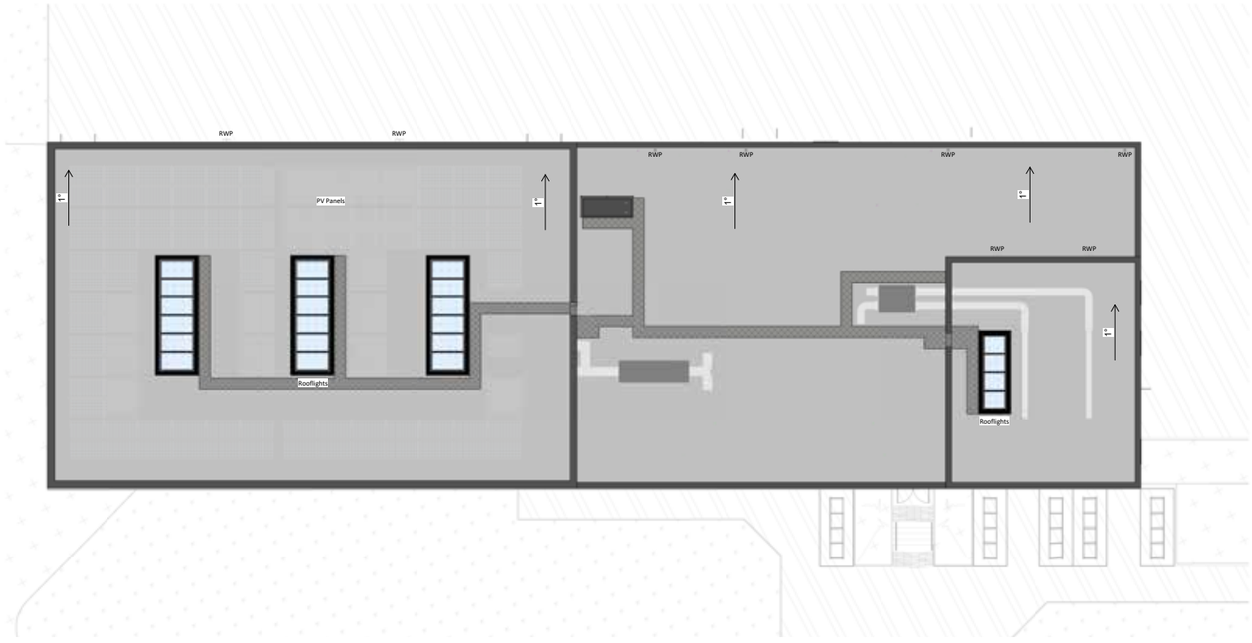
Sports Block Roof Plan

The sport block roof will house more PV panels and plant equipment for extract. There will only be access for maintenance personnel, and this will be via the access hatch with permanent companionway step ladder, which is in a secure cupboard within the building.

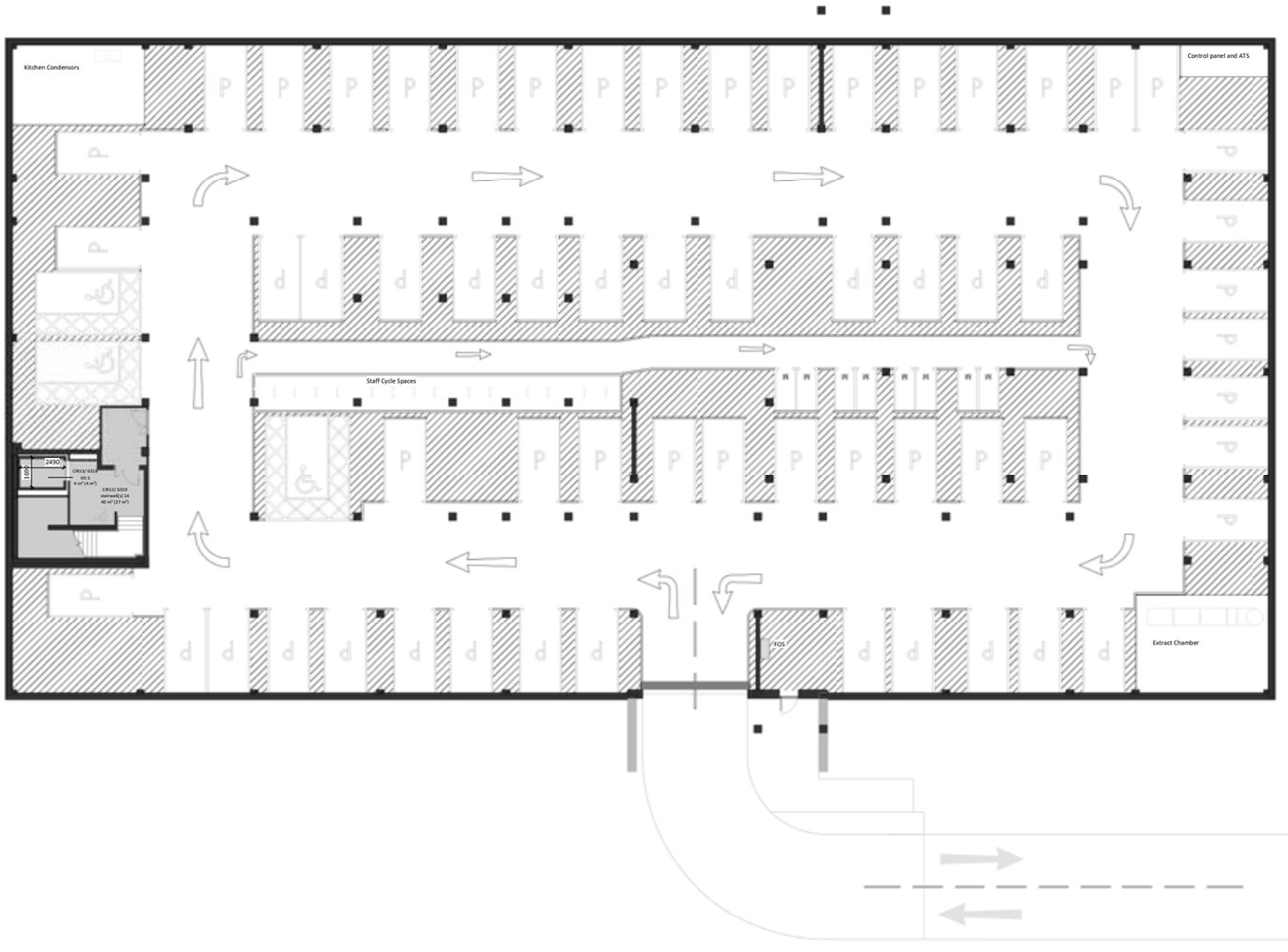


4 DESIGN PROPOSALS

Teaching Block Basement Car Park Plan

The basement car park will predominantly be for staff to park on site, with a few visitors able to use it, should the main visitor car park be full.

The structural columns from the building above have had an impact on the available layout of the parking. As such, there are 61 standard parking bays, 3 accessible spaces, 8 motorbike spaces, 28 bicycle spaces (14 hoops).



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View 01 | Visitor Entrance

View 02 | Student Entrance into Dining Hall

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View 03 | Learning Resource Centre

View 04 | Main Hall

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View 06 | Community Room

View 05 | Dining Hall from first floor corridor

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View 07 | Activity Studio

View 08 | Sports Hall

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4.9 Elevation Design

As set out in the previous sections, the starting point for the elevation design was to take guidance from the Masterplan Design Principles as well as the following considerations

- The outline planning approved elevations were predominantly brick, with accent materials for highlighting structural elements
- The school is to be a gateway building into the rest of the site
- The school have a civic presence on the street
- Materials should be high quality and robust, suitable for a school.

Materials

The design principles document requires the building to be predominantly brick with a maximum of two additional materials to add contrast.
For the main teaching block,it is proposed to use mechanically fixed, buff brick slips, on our SIPs panels. We are proposing to use a darker buff brick to add contrast to certain features. On the sports block, we are proposing to use the same buff brick slips, with panels of painted fibre cement weather board to provide some variation to the mass of the building.

Appearance

The teaching block has a fairly long facade on the east and west elevations, due to the amount of accommodation that is required. Our intention was to break up this long facade vertically, by using brick piers to highlight the positions of the primary structure within.

Windows

The Design Guide document requires windows to be simple and vertically emphasised. We have chosen simple punched windows, set out in a regular pattern, with a vertical aspect, as suggested in the design guide. As previously mentioned, out window configuration not only complies with the principles of the design guide, but also meets the DfE's strict requirements for natural daylighting and ventilation. Our windows also provide maximum flexibility for internal fixed furniture and equipment.


Successful Brick Environments


Successful Brick Environments

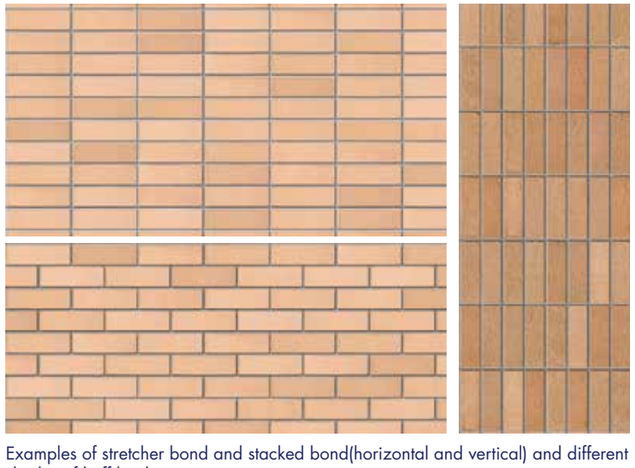

Variation of surface texture


Variation of surface texture

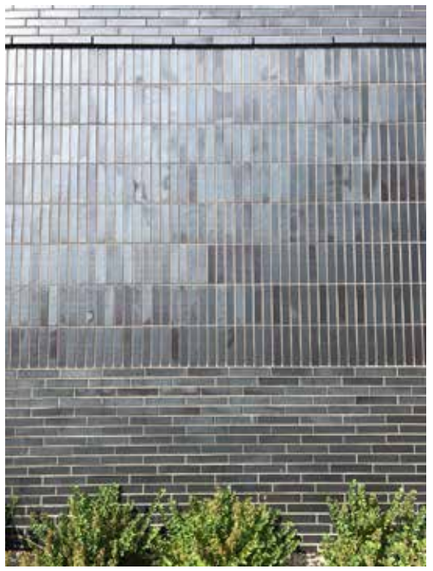

Ventilated screen

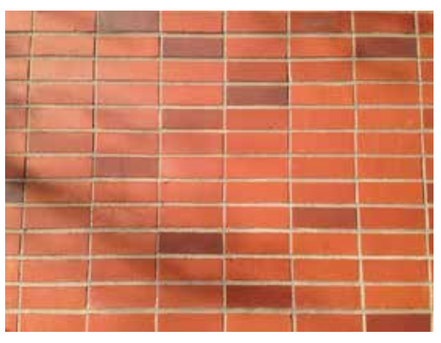

Intrigue in execution

Extracts from the design principles document showing successful brick facades.



Examples of stretcher bond and stacked bond(horizontal and vertical) and different shades of buff brick.





Precedent images of varying brick bond

4 DESIGN PROPOSALS

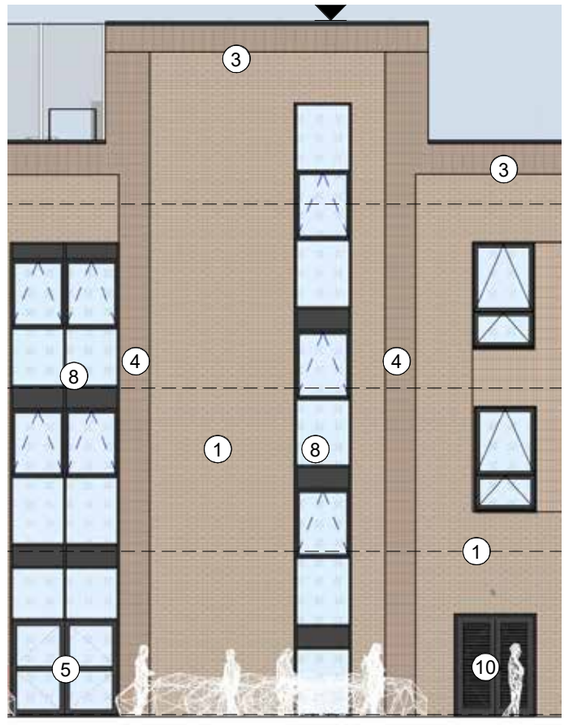
Detailing

The two prominent corners to the building, the north east corner and the south east corner, that both face the street, have feature bays of projecting brickwork with the school signage which are visible on approach from both directions on the main street frontage, announcing the school's presence.
The windows are grouped together by using panels of stacked bond bricks to add interest at the upper levels.
The brick piers that break up the elevations are to also be a stacked soldier stretcher bond and these project from the elevations to provide some relief along the length of the building. These, along with the banding at the top of the building, will be a darker buff brick.

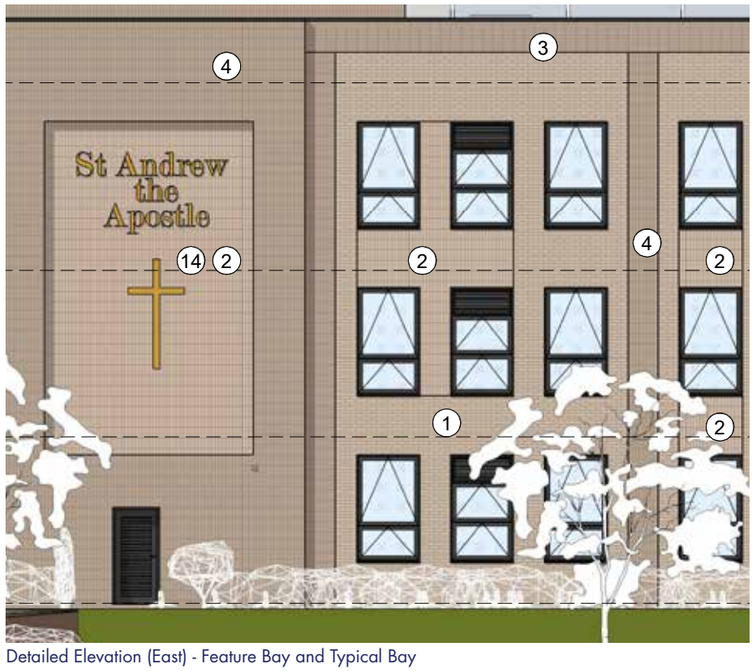
The stairs feature strips of glazed curtain walling, which provide further vertical emphasis to the elevations and help to break up the line of the building, especially the south and west stair cores, which provide access to the roof.

The sports block features the same vertical brickwork piers as the main building in the darker buff brick. As the sports block has few windows, due to the nature of the activities inside, panels of weatherboard have been proposed, this will give texture and break up the elevations, and help the building sit well behind the trees and landscaping especially on the eastern elevation.

Detailed Elevation (North) - Main Entrance and feature bay



Detailed Elevation (South) - Curtain Walling and student entrance



Detailed Elevation (East) - Feature Bay and Typical Bay

Detailed Elevation (West) - Sports block entrance

4 DESIGN PROPOSALS

Teaching Block North Elevation (Main Entrance)

Teaching Block West Elevation

1. Mechanically fixed, light Buff brick slips. Horizontal stretcher bond.
2. Mechanically fixed, dark Buff brick slips, projecting 20mm. Vertical soldier stacked bond.
3. Mechanically fixed, light Buff brick slips. Flush. Stacked bond.
4. Mechanically fixed, dark Buff brick slips projecting 20mm. Vertical soldier stacked bond.
5. PPC Dark grey framed fully glazed door
6. PPC Dark grey aluminium framed window
7. PPC Dark grey louvred aluminium framed window
8. Dark grey aluminium glazed curtain walling
9. Galvanised access ladder
10. PPC Dark grey door with louvre over panel
11. Sliding entrance door.
12. Rooftop MUGA chainlink fencing
13. Dark Grey PPC Parapet capping
14. Signage - bespoke school lettering and cross symbol - aluminium lettering fixed to brickwork
15. Flush Solid Sports Hall Door
16. Photovoltaic Panels - required for planning and Part L compliance.
17. Rooflights
18. Rooftop plant
19. Handrail
20. Extract flue
21. Lapped weatherboard - painted.

4 DESIGN PROPOSALS

Teaching Block East Elevation

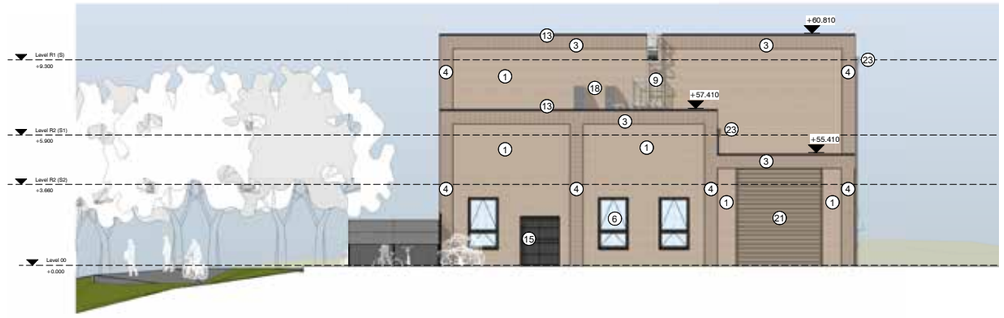
Teaching Block West Elevation

4 DESIGN PROPOSALS

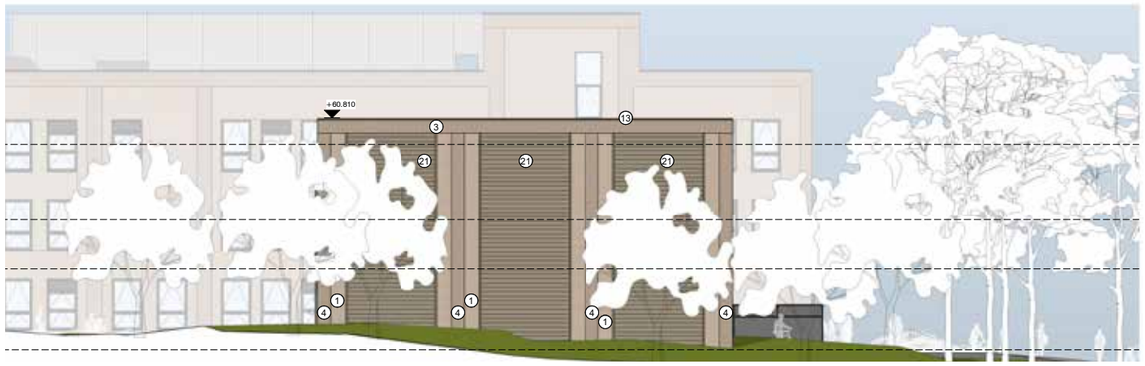
View of student entrance and south elevation of the teaching block

4 DESIGN PROPOSALS

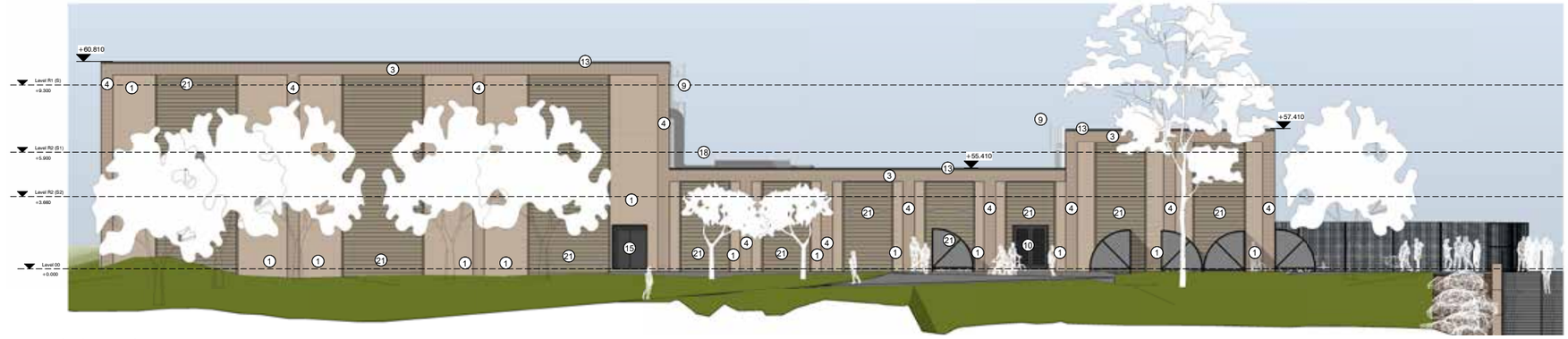
View of East Elevation with Pupil Entrance



Sports Block North Elevation



Sports Block South Elevation



Sports Block East Elevation

Sports Block West Elevation

1. Mechanically fixed, light Buff brick slips. Horizontal stretcher bond.
2. Mechanically fixed, dark Buff brick slips, projecting 20mm. Vertical soldier stacked bond.
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17. Rooflights
18. Rooftop plant
19. Handrail
20. Extract flue
21. Lapped weatherboard - painted.

View of Sports Block Entrance

4 DESIGN PROPOSALS

4.10 Crime Prevention & Safer Places

Site Safety and Security

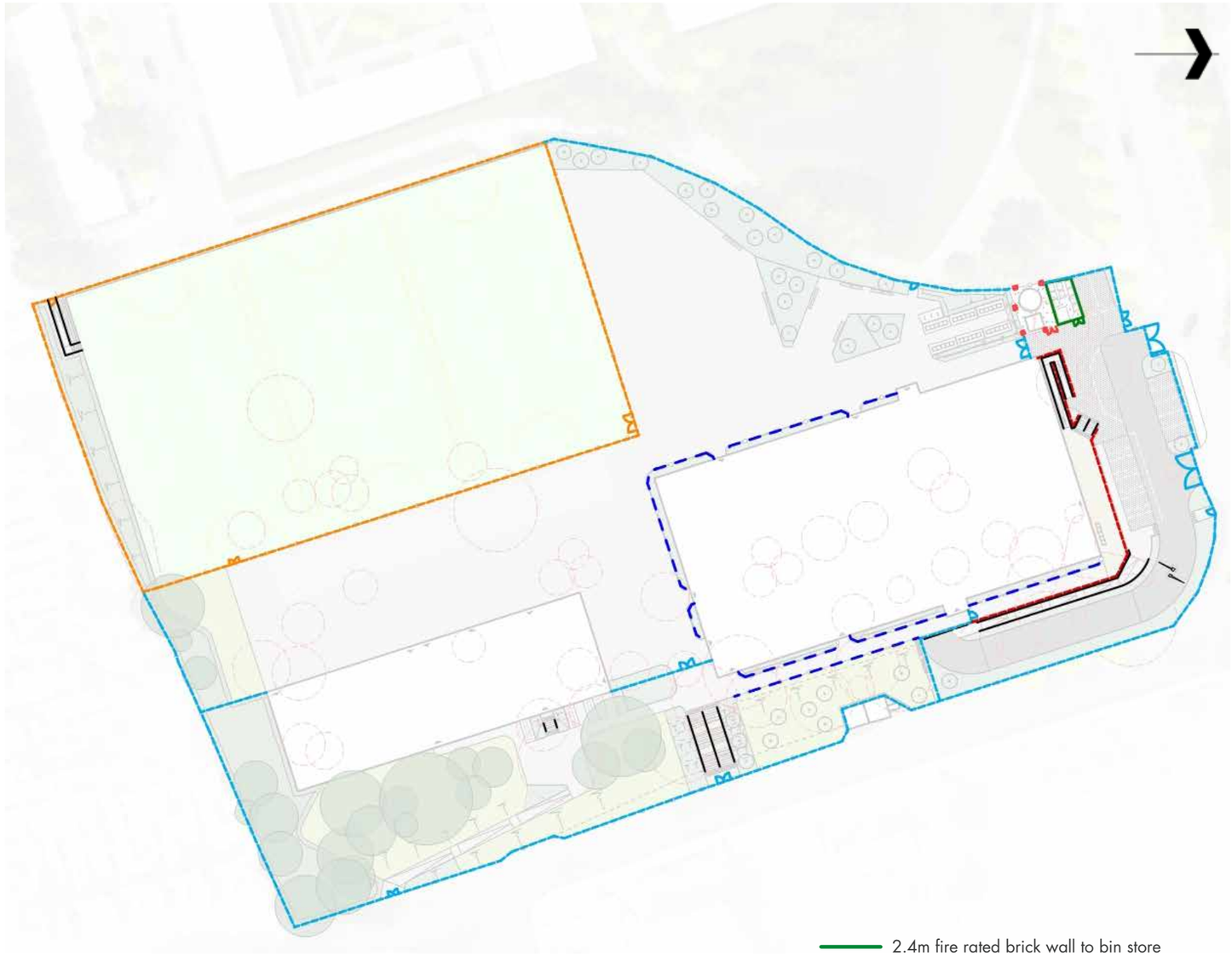
The development has been designed to create a clear distinction between publicly accessible and secure spaces. The car park and entrance area to the North of the school building is accessed via separated external pedestrian and vehicle gates and is securable outside of school hours. The site plan has been designed so that part of the building, the north elevation, provides the secure line giving a positive, welcoming appearance. The rest of the site is secured by fencing and gates. The area that is accessible to visitors prior to signing in at reception is small when compared with the rest of the site and is positioned so that it is easily surveilled. Cycle storage is within the secure line away from the reach of opportunist thieves.

We have maximised the site area available for safe and secure school use, segregating parking from cycle and pedestrian routes into the school. With all external play, sport and social areas behind secure lines, provided either by the building itself or by a fence line, pupils can both feel and be safe. Occupied spaces have been provided throughout the school to enable passive supervision of internal and external areas ensuring a safe environment without the sense of overt control. CCTV has been included to key spaces and the basement car park for added security.

The 4G All weather pitch has a 3m fence to prevent balls being lost over the boundary, and to deter trespassers. The whole site is protected by a 2.4m weldmesh fence to the perimeter.

Site Access

There is one vehicular entrance and one exit at the north part of the site. There are 2 additional pedestrian access gates which will be used by pupils at the beginning and end of the day. Passive supervision of the main access is provided via the general office and school reception, with the Headteacher's office overlooking the main pupil entrance from first floor level. The two additional pedestrian entrances will be managed and staffed by the school to ensure supervision and access only during the start and end of the school day.



Proposed Boundary Treatment Plan

4 DESIGN PROPOSALS

At the beginning of the day, pupils will enter from the North, East or West via monitored gated entrances and make their way into the Teaching Block via pupil entrances to the South and West. Visitors will enter the school via the school reception within the new Teaching Block. Access beyond the secure lobby is via reception control only.

Community and Out of Hours Use

The shared use of parts of the school site and buildings by the local community has been considered in the light of the security risks that this might present. Direct community access is available to the sports hall and does not require travel through educational areas or opening up of the rest of the school. Zoning of the accommodation has been carefully considered to maximise the potential for wider community use. The main hall and drama studio are accessible for performance, events and community groups without opening the rest of the school, as separate a reduced community zone. The strategy allows the school the flexibility to open up other areas of the school for community or out of hours use if required.

Typical Ground floor occupancy number: 958

Circulation and Security Strategy

- School Building Community Access
- Visitor Lobby
- Restricted Access
- No Access
- Secure Line
- * Door can be locked to secure community use areas

5 LANDSCAPE PROPOSALS

5 LANDSCAPE PROPOSALS

5.1 Design Development

Analysis of approved scheme

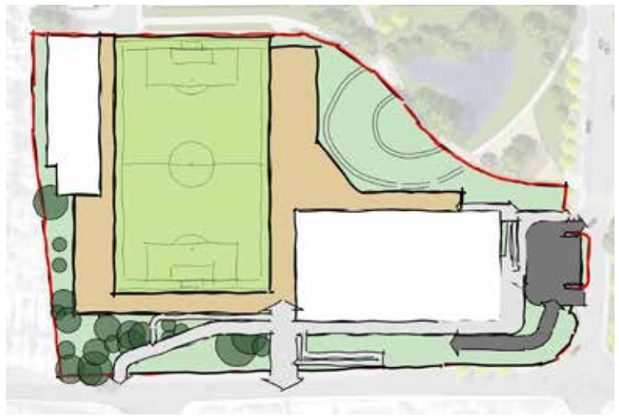
Our first task for developing the proposals was to critique the planning approved school plan. There was a number of inefficiencies with this masterplan and some improvements could clearly be made

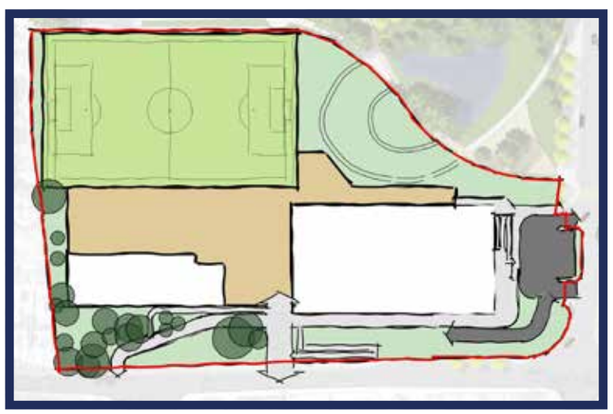
Masterplan Optioneering

To look to improve on the approved scheme we developed a number of site options where we tested the building locations, building forms and sports pitch orientation.

Following analysis of these options and close discussions with the school we determined that the option with both buildings to the east elevation and the narrow sports block was the preferred solution.

The benefits of this option are;
- improved connection and circulation between main block and sports block
- preferred orientation of sports pitch north - south
- increases usable school space and improved BB103 calculations
- regular shaped hard informal spaces offer greater flexibility
- simplified access arrangements
- improved wayfinding to reception and main entrance
- existing mature trees still retained





Selected Masterplan

5 LANDSCAPE PROPOSALS

5.2 Design Response

The role of landscape in the scheme has been to create a masterplan for the site which is responsive to the parameters of: the Comer masterplan, the MMC Framework, the school operational requirements and DFE guidelines, but most importantly its response to the site's unique opportunities and constraints.

The land parcel within the wider Comer residential masterplan is the most south eastern point of the site and acts as a gateway into the site from Brunswick Park Road. The school will therefore become a key focal feature along the road and accessing the new residential development.

A number of building orientations and layouts have been tried and tested, resulting in the chosen proposals that best maximise the opportunities of the site, minimise impact to sensitive areas and benefit greatest the school.

The site's topography has had a significant influence in the development of the site layout. From the placement of built form on the raised plateaux, to the arrangement of sports pitches to ensure free movement and accessibility for all across the site. The result has been a design that effectively frontages the key boundaries, provides easy access and wayfinding, whilst also maintaining the existing mature tree planting.

In terms of accommodation the proposals account for: a visitor and DDA car park, basement staff car park, pedestrian arrival plaza, a series of hard and soft informal external spaces, pupil and staff cycle parking spaces, a sprint track, roof top MUGA and a artificial turf football pitch.

Proposed Landscape Masterplan

5 LANDSCAPE PROPOSALS

5.3 Site Security

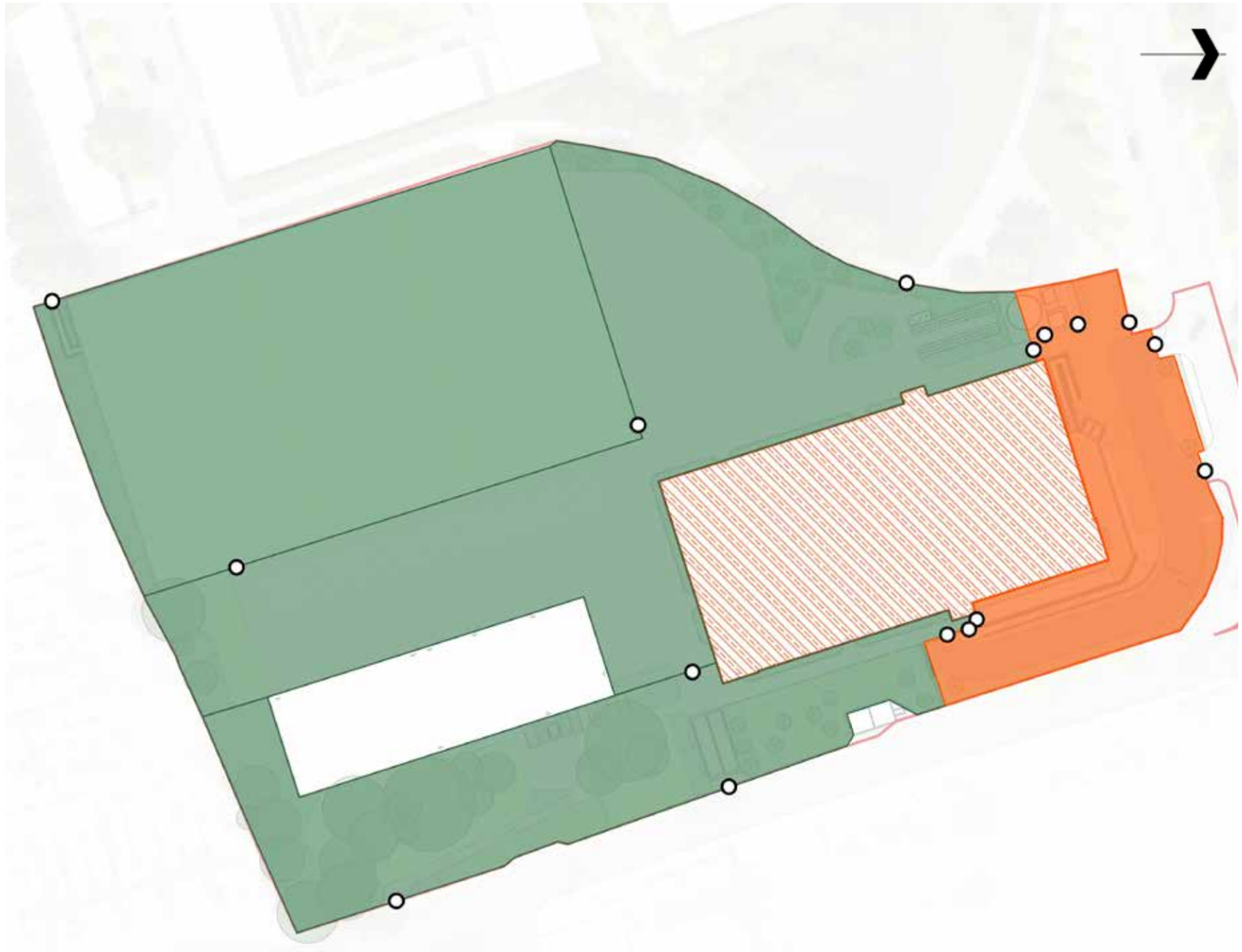
Site Perimeter

Secure fencing will be located to the perimeter of the site to secure the school. This bounds the whole site ensuring the school can control access at all times.

The secure line location maximises the usable space for the school ensuring the site is as efficient as possible and benefits the pupils.

There will also be internal lines of security that provide the school greater control of how they allow access for different uses into the site.

Secondary boundary gates to the north boundary will also provide alternative options for the school to allow access to the site.



Gate location

Publicly accessible area

Controlled access area to basement

Secure area

Proposed Secure Line Plan

5 LANDSCAPE PROPOSALS

5.4 Boundary Treatment

Site Perimeter

A 2.4m tall weldmesh fence will be used to the perimeter of the site. Internal fence lines will also be 2.4m to ensure the school can adequately control access to the different areas. This is especially important for community use and use of the school out of normal school hours.

Sports Facilities

The artificial turf pitch and MUGA will be bound by specialist rebound sports fencing. The roof top MUGA will also feature ball stop netting to form a roof to ensure balls stay within the enclosure.

Car Park

The car park will be controlled access at the boundary line with the use of double gates for entrance and exit. For the basement car park an automatic rising arm barrier and shutter will control access.

Service Facilities

A 2.4m close board timber fence is proposed to the sprinkler tank enclosure. A 2.4m fire rated brick wall encloses the bin store. Both of these boundary treatments prevent views into the enclosures. The sprinkler tank size has been determined by a requirement to provide a 60 minute water supply.

- 2.4m fire rated brick wall to bin store
- 2.4m timber closeboard fence to sprinkler tank enclosure
- 2.4m weldmesh fencing
- 3.0m sports rebound fencing
- 1.1m pedestrian guardrail railings
- 0.6m timber knee rail
- 0.9m handrails

Proposed Boundary Treatment Plan

5 LANDSCAPE PROPOSALS

5.5 Access and Circulation

Pedestrian Access

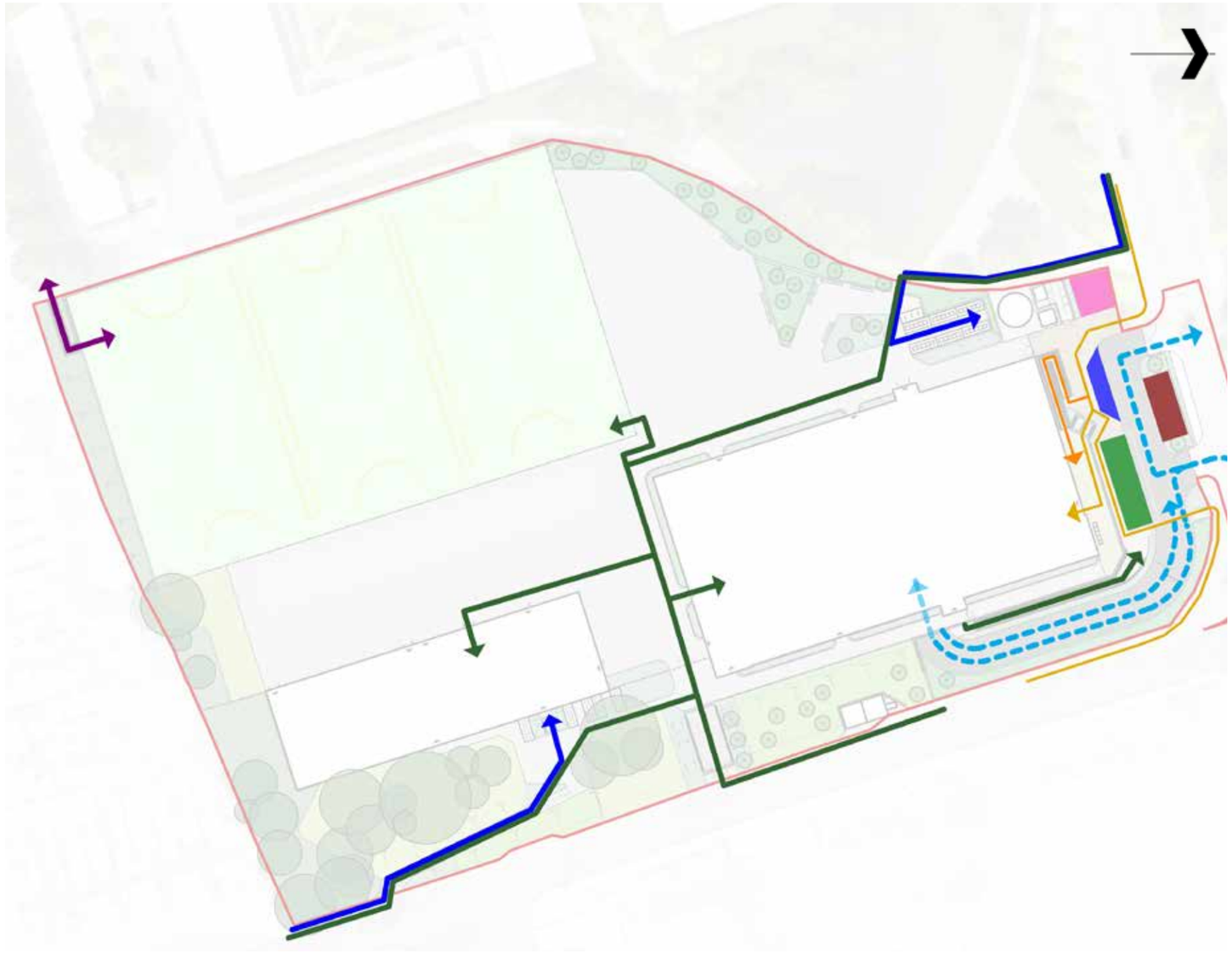
Main pupil access will be via the focal external stair access from Brunswick Park Road with alternative points of access the south eastern corner of the site for a level approach, and also from the north west boundary via the new park proposed as part of the wider Comer masterplan.

Visitors and late pupils will access via the main entrance to the north boundary, through the car park and be directed to the reception via the proposed pedestrian plaza and drop down space.

Vehicular Access

All vehicular access will enter the site via the one way access route to the north of the site. The initial car park will accommodate visitor and DDA circulation, as well as provision of a lay-by for service, deliveries and refuse collection.

Access to the basement car park will be adjacent the visitor car park entrance and be accessible via a controlled access point.



- Pupil (on time) circulation
- Visitor and late pupil circulation
- Cyclist access
- Accessible route to main entrance (also for visitor cyclist access)
- Ball retrieval access (or community access)
- Vehicle access to front and basement car parks
- Visitor parking bays (5no.)
- Minibus parking bays (2no.)
- Accessible parking bays (5no.)
- Delivery/ refuse pull in bay

Proposed Access and Circulation

5 LANDSCAPE PROPOSALS

5.6 External Sports Provision

Sports Provision

Masterplan of the site and orientation of the buildings has helped to maximise the available sports provision possible on site. The site includes the following facilities;

Artificial Turf 3G Pitch :
91x55m (85x49 pitch area with 3m run-off)
3m rebound weldmesh fencing
Markings to include; 11 aside football, 3 x 5aside football

50m Sprint Track:
50m + 10m run out and 2m starting grid
6 no lanes
Standard asphalt surface to maintain flexibility

Roof top MUGA :
18.5 x 37m Polymeric Multi-use playing surface

2no. Half basketball courts for informal sport/ recreation:
Markings to include; half basketball courts
Rebound weldmesh fencing and ball stop netting to roof
Access via roof top stair core

Proposed Sports Provision Plan

5 LANDSCAPE PROPOSALS

5.7 Hard Landscape Materials

A palette of robust materials has been chosen for the various external areas to ensure longevity and practicality; both for the users and the management team who will be maintaining the schools.

Materials will be sustainably sourced, reducing the impact on the environment, and sourced locally where possible to reduce shipping costs.

Street Furniture will include external seating, cycle shelter, cycle hoops and litter bins. Furniture has been positioned strategically to define spatial use and to create functions around the site.

PAVING

Pedestrian approach to main entrance

Hard informal and social external areas

Parking bays

FENCING

School security fencing

All weather pitch fencing

Pedestrian guardrail railings

STREET FURNITURE

Covered cycle shelter

Cycle stands

Outdoor benches

5 LANDSCAPE PROPOSALS

5.8 Planting

Tree Planting

Trees have been used to accentuate prominent routes and spaces, specifically the main pupil approach with trees lining the formal stair. Additionally, trees have been used to reinforce existing boundary planting and provide a sense of definition or enclosure to the external spaces. This palette has been developed for: its robustness to site conditions, extended seasonal variety and its ability to quickly give a sense of presence and structure to the landscape.

Structural Planting & Amenity Grassland

The planting design aims to increase verdancy and improve ecological value across site. This will not only be achieved through the introduction of additional species but also through maintenance operations in the form of differential mowing regimes and the creation of additional habitat amenity. Planting across the site will also help delineate spaces for refuge, and seeks to encourage alternative outdoor environments for quiet, contemplative and/or social play.

Existing Vegetation

Mature tree planting to the south east corner of the site will be retained.

TREE PLANTING

Avenue planting to main entrance

Boundary Reinforcement Planting

Specimen tree

STRUCTURAL PLANTING

Hedge planting

Specimen ornamental grass

Specimen perennial forb

MEADOW & AMENITY GRASSLAND

Species rich grass seed

Grass sports pitch areas

Mown grassed areas

6 ACCESS

6 ACCESS

6.1 Transport and Travel

Travel Plan

A Travel Plan has been produced by Velocity Transport Planning and submitted as part of this application. The Travel Plan proposes short and long-term strategies for reducing dependence on travel by private car for essential and nonessential journeys made by pupils, parents and visitors to and from the school site.

Transport Assessment

A Transport Assessment has been produced by Velocity Transport Planning and submitted as part of this application. The purpose of the Transport Assessment is to consider the implications of development related travel on the operation of the surrounding highway and transport networks. In addition the Transport Assessment considers access arrangements, parking and application site connectivity by sustainable modes.

New Brunswick Park (South)


CF Moeller, Atchletes Village, N13 & N26


McCreanor Lavington Architects, St Andrews, Bromley-on-Bow


Glenn Howells Architects, Parkside Place


Baumschlager & Eberle Architects, Villa Menti

The Architecture of Brunswick Park South faces onto a park of significant scale and dimension. Combined with the location of Brunswick Park South- within the lower portion of the site- it is justified that buildings of a scale up to 13 storeys can provide the edge of New Brunswick Park South. The scale of the buildings are to avoid unrelenting horizontal expression and are to be broken down vertically to enable a finer grain of elevation. Roofscapes are to be modulated in height to assist the massing breakdown of blocks and avoid unrelieved roofscapes. Other key design elements for further development and description include:

Materials: Use of locally sympathetic materials, such as brick

Openings: simple openings within walls, to avoid large glazed expanses

Ground Interface: generous landscaped margins to provide residential privacy & manage below ground ventilation

Entrances: Multiple entry points to buildings, spaced as frequently as is reasonably possible, to ensure maximum activity at street level. Entry points to be architecturally interesting and well lit.


Clement Vergaly Architects, Housing, Lyon

New Brunswick Park (North)


Glenn Howells Architects, Parkside Place


Baumschlager & Eberle Architects, Villa Menti

The Architecture of Brunswick Park North faces onto a park of scale and dimension c. 100m x 100mm. This portion of Brunswick Park faces lands that are more elevated than the southern area and building heights become lower, to provide a consistent height across the site- it is justified that buildings of a scale up to 8 storeys can provide the edge of New Brunswick Park North. The scale of the buildings are to avoid unrelenting horizontal expression and are to be broken down vertically into enable a finer grain of elevation. Roofscapes are to be modulated in height to assist the massing breakdown of blocks and avoid unrelieved roofscapes. Other key design elements for further development and description include:

Materials: Use of locally sympathetic materials, such as brick

Openings: simple openings within walls, to avoid large glazed expanses

Ground Interface: generous landscaped margins to provide residential privacy & manage below ground ventilation

Entrances: Multiple entry points to buildings, spaced as frequently as is reasonably possible, to ensure maximum activity at street level. Entry points to be architecturally interesting and well lit.


JEMS Architeckti, Wilanowska Housing


KBNK Architects, Poppenbuteler Housing


Baumschlager & Eberle Architects, Ruggachern Housing

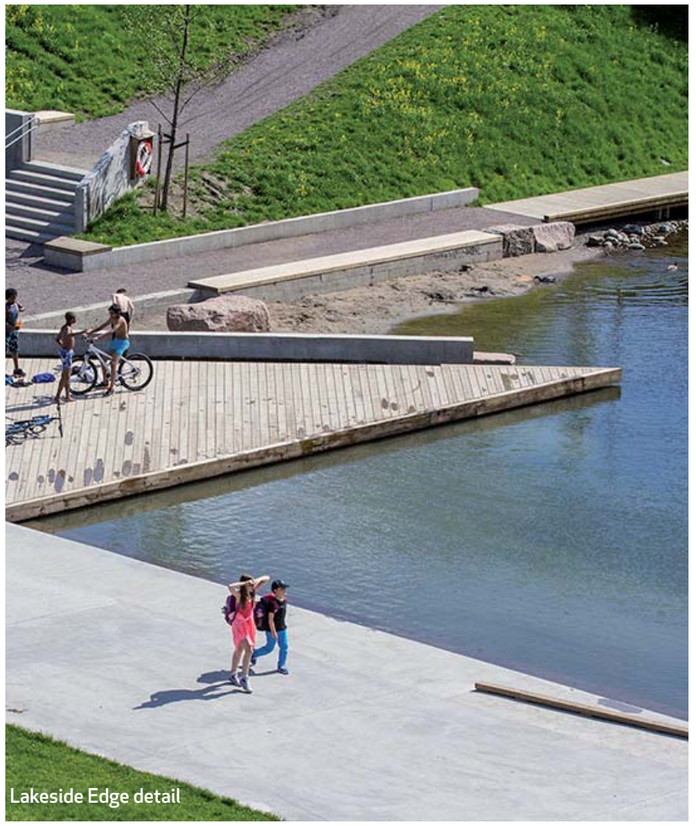
Brunswick Lakeside Park

Brunswick Lakeside Park is a character area that takes its starting point from the existing lake- originally an attenuating feature for water and now a pleasant feature, notably attracting migrating Canadian geese. This character area relies more on the landscape than the buildings that surround the space. The landscape has been envisaged as an informal landscape of trees, grasses and pontoon routes across water. Brunswick Lakeside Park provides a separating area between the proposed school and the residential component of the masterplan. The EFA Baseline school designs offer standardised buildings which have been arranged in the masterplan to provide an informal enclosure of two sides of the space, with a third edge provided by the residential block.


Pontoon Access over Lake


Marginal grass planting


Marginal grass planting

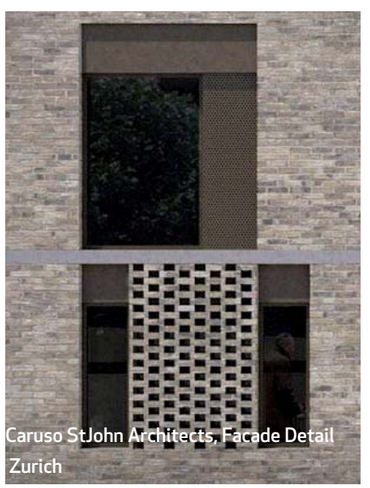

Lakeside Edge detail

Northern Homezones


Proctor & Matthews, Abode at Great Kneighton


Tigg Cole Architects, Battersea housing


b.e. Architects, entry detail, Secombe Grove House


Caruso StJohn Architects, Facade Detail Zurich

The lands to the north of the site are elevated and adjoin sensitive residential boundaries off-site. At the south of the site the masterplan abuts off-site residential use and require similar consideration. These areas of the masterplan are accordingly conceived as 'homeszones' of a density and scale similar to the off-site conditions they abut.

Scale: the scale of the homezones are 2-3 storeys

Unit Typology: residential units try to balance a similarity to the off-site condition with a pattern of density that can be denser and more efficient in its land consumption. Terraces of housing are therefore favoured, setback from boundaries by a traditional 11m setback, but maximizing height (up to three storeys) whilst also minimizing overlooking from upper levels.

Material: Use of locally sympathetic materials, such as brick is favoured

Parking Management: Car parking is either within the unit (ground level garages) or infront of the unit. In either case, careful design consideration to ensure integration of landscape, entry porch & bin storage will be required to ensure parking & service elements do not dominate these elevations.

Street & footpaths: Parallel parking, planted verges and tree lined routes are promoted, of adequate and generous dimension.


KBNK Architects, Poppenbuteler Berg Housing


Proctor & Matthews, Abode at Great Kneighton

Residential Block 1B

Ground Level **First Level** **Second Level**

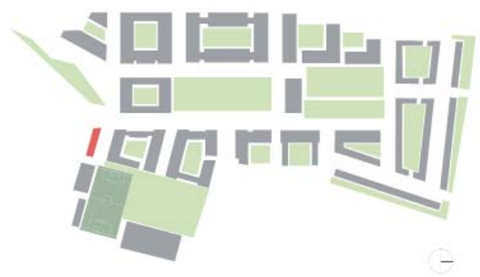
Concept Section

Block 1B

The Design of Block 1B adopts the simple strategy of lining the external site boundary with a terrace of houses presenting their rear gardens to the boundary. This mirrors the prevailing off-site condition in this location of rear curtilages of housing to Brunswick Crescent backing on this shared boundary.

The housing typology is own-door housing, arranged in a terrace. An 11m minimum setback from rear wall to garden boundary is provided as private external open space. House plans are nominally 10m (deep) x 6.5m (wide) and a front curtilage 6.5m deep is provided. The front curtilage is used for car parking for the dwelling, but also provided with a low garden structure to house a bin store (with adequate space for waste separation) and a uniform planter to take a tree that will form a row of trees along the terrace. The front curtilage is also provided with generous areas for resident planting, including pergola structure over entrances, to ensure the front curtilage does not become dominated by car parking or excessive hard-standing surface.

Concept Section



Block 1B Location Plan

Residential Block 1B

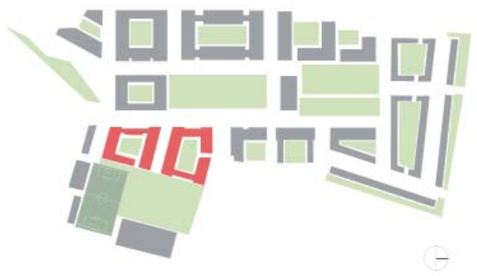
Block 1B Visualisation

Internal house layouts provide for living/ kitchen/ dining at ground level (along with a utility space and ground level WC), with sleeping accommodation on upper levels. The attic level is provided with a large studio space with its own external terrace.

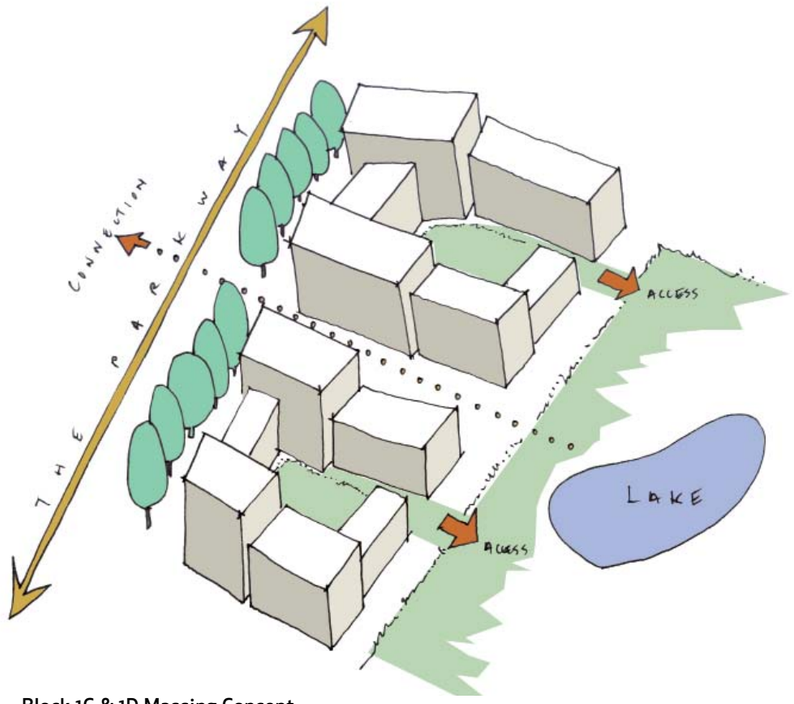
The ground level provides for a through-living arrangement, allowing full view from front to back to assist surveillance of the street and an open living arrangement for residents. Movement between front and rear garden space avoids having to traverse living areas and a second 'service' route is provided, through the utility space.

Elevations are proposed in yellow clay brick, with chimneys expressed on the front facade providing a regular rhythm to the street elevation. The external terrace at level 2 helps to breakdown the mass of the elevation on the top level. In conjunction with the level 2 pergola to all units, it is hoped that a planted and articulated roofline can be established.

Residential Blocks 1C & 1D



Block 1C & 1D Location Plan



Block 1C & 1D Massing Concept

Block 1C & 1D Visualisation to the Parkway

Location & Massing Strategy

Blocks 1C and 1D occupy a location within the masterplan that front onto The Parkway (and New Brunswick Park South) at the south-western boundary and Brunswick Lakeside Park on the north-eastern side. These opposing frontages are quite different in their character and determine the massing strategy for these Blocks.

The Parkway and New Brunswick Park South is a large open public parkland and it is proposed that the generous size of this public open space is to be fronted with the tallest buildings within the masterplan, where the width-to-height ratio of this space can accommodate such structures. As such the mass of Blocks 1C and 1D on the south-western elevation is proposed at a maximum general height of 7-levels, with modulation within this height over the parapet to allow 5 and 6 storey portions of this elevation to achieve a breakdown of the overall scale. It is noted that the substantial rise in ground level over the length of this elevation (from 50.0m AOD at the southern point to 57.0m AOD at the northern end) equates to a storey difference of over 2 levels from north to south. This has the effect of assisting the aim of providing an articulated roofline, as the variating building heights work in conjunction with the stepped levels to achieve a parapet that is not horizontally dominant.

On the opposite side of the block, Brunswick Lakeside Park is a public parkland that is of similar width but of a vertical scale that is lower, reflecting the masterplan density strategy and the character of Brunswick Lakeside Park as a more natural and less formally fronted public space. This character translates to a built edge, of Blocks 1C and 1D, that is also variated in it's roofline, but at a scale ranging from 3 to 5 storeys. In this composition the taller elements provide a punctuation to the more general lower level terrace of 3 storeys.

Residential Blocks 1C & 1D

Block 1C & 1D Visualisation to Brunswick Lakeside Park

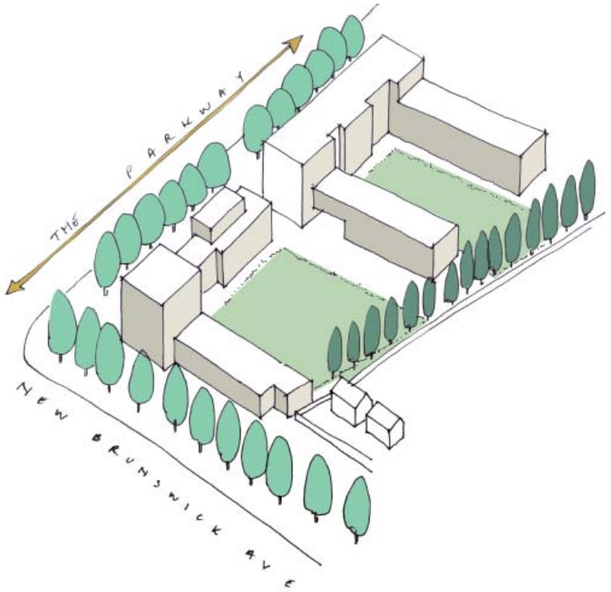
The blocks are thus completed and disaggregated by stepping the heights across the Block from Brunswick Lakeside Park to New Brunswick Park (south). The Blocks are provided with a private courtyard each and the space between blocks is proposed as a new pedestrian linking Street between the 2 new principle public spaces within the masterplan. Each private courtyard is broken as it faces Brunswick Lakeside Park to provide a screened visual link between the public Park and the private Courtyard. Residents may use this link to move between the 2 amenity spaces.

Another break in the block is provided to Block D as it fronts New Brunswick Avenue, for direct cycle access from this Avenue into the basement cycle parking area, via a cycle lift. This is a controlled gate, for resident access only.

Residential Blocks 1C & 1D

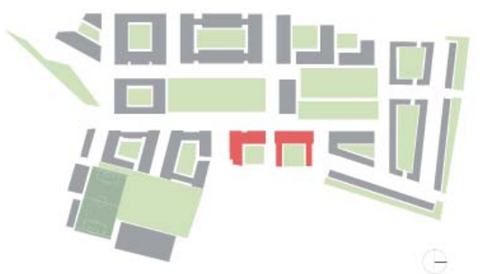
View from New Brunswick Parl (South)

Residential Blocks 1E & 1F



Block 1C & 1D Massing Concept

Block 1E & 1F Visualisation to the Parkway



Block 1E & 1F Location Plan

Location & Massing Strategy

Blocks 1E and 1F occupy a location within the masterplan that front onto The Parkway (and New Brunswick Park South) at the south-western boundary and the existing residential community at Brunswick Park Gardens on the north-eastern side. These opposing frontages are quite different in their character and determine the massing strategy for these Blocks.

The Parkway and New Brunswick Park South is a large open public parkland and it is proposed that the generous size of this public open space is to be fronted with the tallest buildings within the masterplan, where the width-to-height ratio of this space can accommodate such structures. As such the mass of Blocks 1E and 1F on the south-western elevation is proposed at a maximum general height of 7-levels, with modulation within this height over the parapet to allow 5 and 6 storey portions of this elevation to achieve a breakdown of the overall scale. It is noted that the substantial rise in ground level over the length of this elevation (from 57.0m AOD at the southern point to 63.0m AOD at the northern end) equates to a storey difference of 2 levels from north to south. This has the effect of assisting the aim of providing an articulated roofline, as the variating building heights work in conjunction with the stepped levels to achieve a parapet that is not horizontally dominant.

The boundary condition to the existing dwellings at Brunswick Park Gardens requires a different massing strategy, to ensure that any new buildings are not overbearing in their scale. This is achieved as follows:

- Heights are reduced to blend the inner masterplan heights with the existing heights at Brunswick Park Grdns
- A duplex typology of own-door units, accessed from ground level is used, rather that the taller apartment typology
- No facing windows are proposed facing towards Brunswick Park Road in close proximity to the boundary. A 45m separation distance for facing windows is set as the minimum.

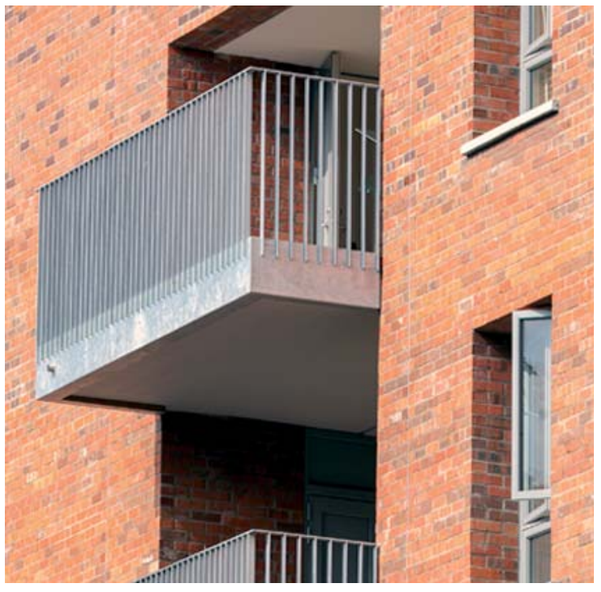
Residential Blocks 1E & 1F

View from New Brunswick Parl (South)

Residential Facade Design

Private terraces of useable proportion

Terraces contained and integrated into the wider facade



Useable, simple and drained terrace

This datum level is expressed on elevations as a continuous horizontal natural stone band (white granite). Between horizontal bands brick infills solid walls and windows/ insulated window panels infill open sections. This aims to reduce the intensity of façade details and provide a simple final appearance.

Balconies are completed with a simple painted mild steel vertical array handrail.

The approach contains all elements of the façade within the prescribed envelope of the building and does not propose any protrusions or cantilevering balconies. The effect for residents is a more integrated and useable provision of private open space into the dwelling unit, as terraces an environmentally better shielded. The effect for the masterplan is of contained and formal buildings that cannot present the accoutrements of domestic life on balconies to be visible for all.

This approach is applied to the middle sections of facades, however at building bases and roofscapes, variation is introduced to express these zones. Building bases are provided in a natural grey limestone finish, to offer a material variation at the base of the building, but more importantly to allow for a robust ground level material capable of withstanding the increased wear and tear its location demands. Roofscapes are varied in their height, as previously outlined. They also contain double-height penthouse apartments that allow for a more varied fenestration arrangement at high level and an expression of a taller, double height, register.

Entrances mark another local position on elevations to express double height entrance lobbies and introduce a modulation of the base material, limestone, over two levels to create architectural play at entry points.

Proposed Materials: Residential Blocks 1C, 1D & 1E

Brick Facades

01 **Public-facing external facades (1B, 1C, 1D, 1E)**
Light Yellow Clay Brick, horizontal stretcher course, bedded in white mortar

02 **Public-facing external facades (1F)**
Red Clay Brick, horizontal stretcher course, bedded in white mortar

03 **Windows**
Composite timber/ aluminum windows with Aluminum External Framing, colour White (set in yellow brick) & graphite Grey (set in red brick)

04 **Window opening vent detail**
Feature window vent openings to be provided in lacquered timber panel, within window fabrication

05 **Handrails & balustrades**
Handrails & Balustrades in black painted mild steel circular section vertical rails, with flat plate black painted mild steel handrail

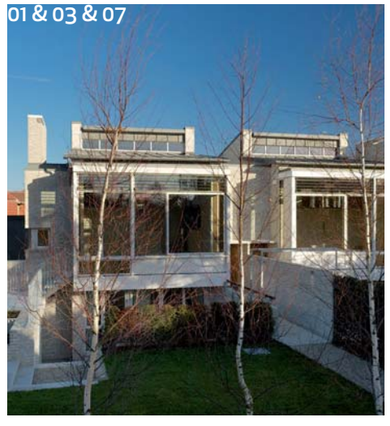
06 **Building Plinth**
Base plinth in grey Limestone laid in 300mm/ 450mm horizontal coursing

07 **Trims & Flashing**
Parapets, copings & flashings in naturally patinated zinc sheeting

08 **Private-facing external facades (courtyards)**
Exterior face of Internal Courtyard walls finished in white rendered insulation to above ground levels (above the ground level limestone plinth)

09 **Architectural Detail**
Architectural banding, coping to top of brickwork & localized detail executed with natural white granite stone

Proposed Materials: Residential Blocks 1C, 1D & 1E



Windows & Fenestration

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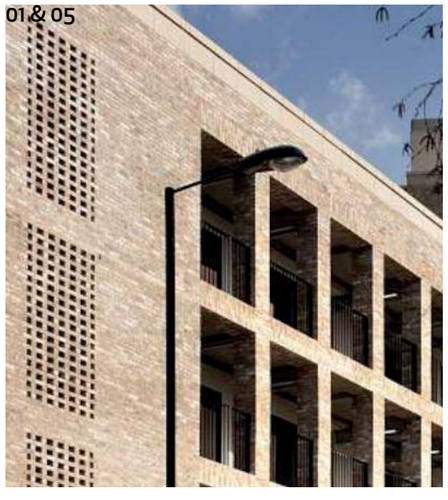
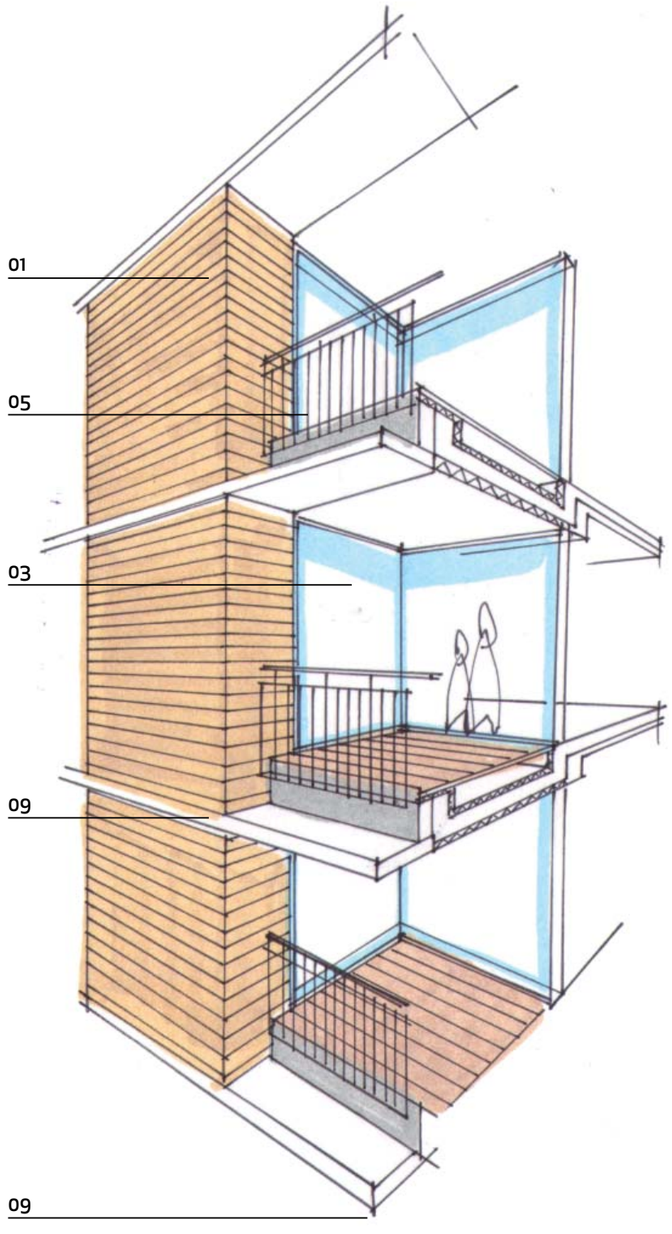
Proposed Materials: Residential Blocks 1C, 1D & 1E

01 & 05

01 & 09

01 & 05





Terraces & Private Open Space

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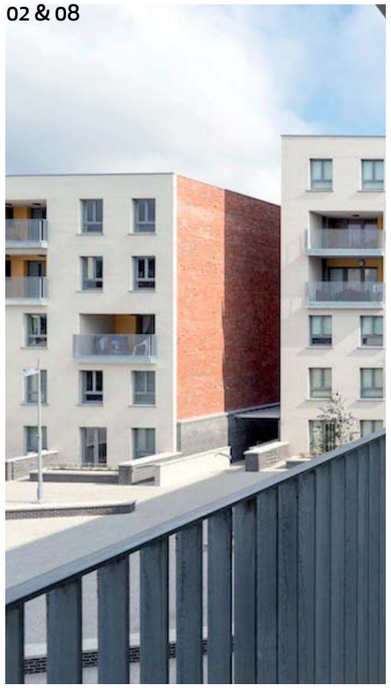
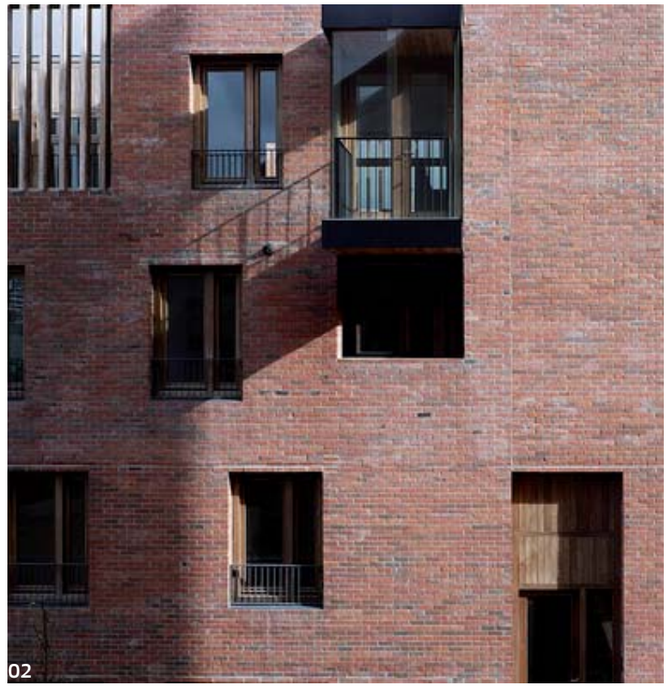
Proposed Materials: Residential Blocks 1C, 1D & 1E

02 & 08





02

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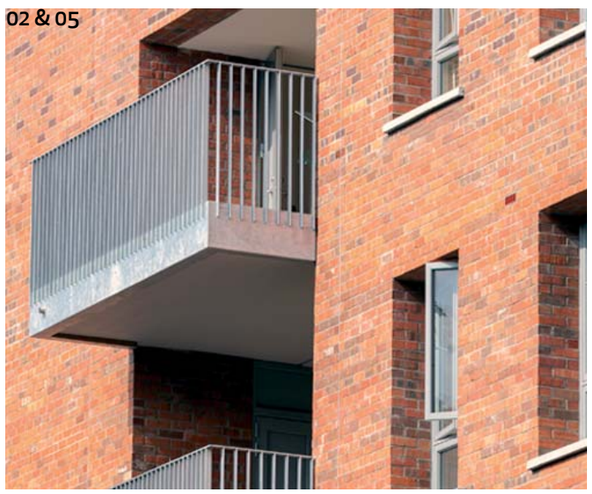

02 & 05

02

06

Block 1F Material Use

01 **Public-facing external facades (1B, 1C, 1D, 1E)**
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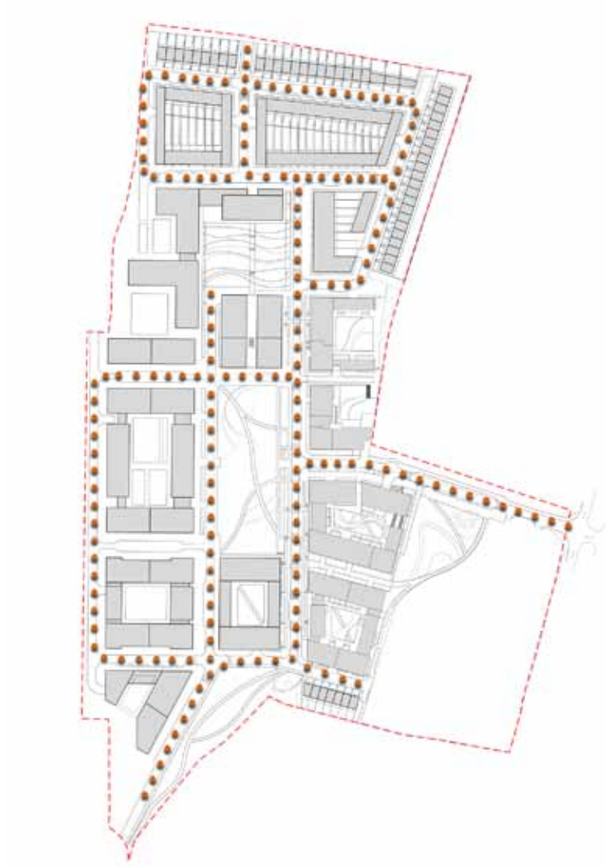
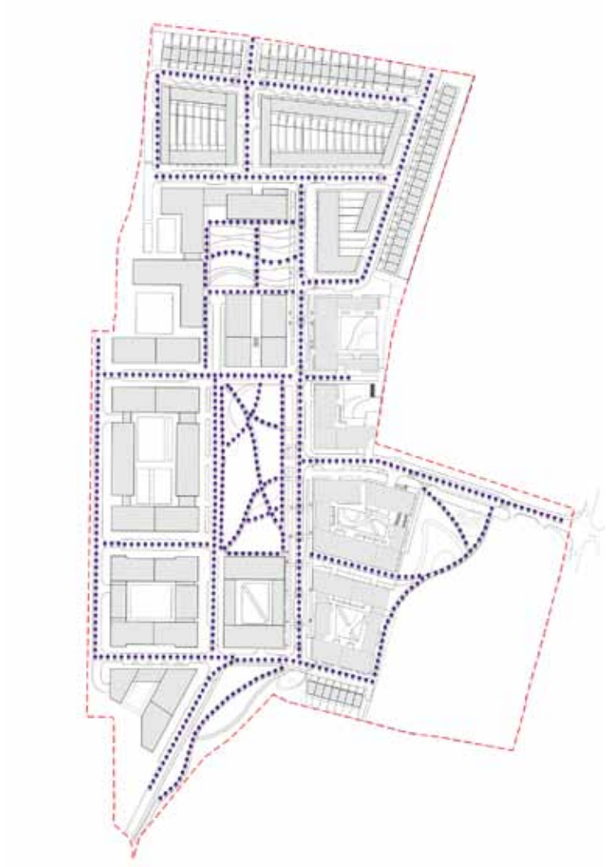
10.0 | Landscape

Site wide Masterplan

Primary vehicular routes



Primary cycle routes



Primary pedestrian routes

Connectivity, Permeability & Placemaking

01 **Movement Patterns and Connectivity**

The site is easily accessible and is open and walkable by the public, with routes from the main entry points forming the basis of natural way-finding on the ground. Key junctions and decision points are signified at the nodes shown on diagram.

Principle routes run through the site connecting key spaces into the existing suburban fabric. Main pedestrian routes are shown connecting Oakleigh Road to the South of the site to Brunswick Park Road to the East and Ashbourne Avenue to the North of the site. Pedestrian routes are created through all major green spaces and parkland connecting equipped areas of play to the main thoroughfares. Accessible pedestrian routes are provided in areas of steep gradients and level access is provided to all residential dwellings.

Cycle routes link the main routes and the site is designed to create a pedestrian/cycle dominated public realm with wide footway, shared surfaces and raised crossings at main junctions.

The site is accessed by vehicles from Oakleigh Road to the South and Brunswick Park Road to the East. Secondary roads link the main routes to basement parking access ramps. Limited on-street parking is provided to the North of the site.

Site wide Masterplan

Landscape Masterplan

Illustrative view across The Parkway towards Central Park South

Illustrative view across Central Park South

Introduction

01 Landscape and Public Realm

The main focus of the landscape design has been to work with the existing site levels and the retention of as many of the existing trees as possible. The location of the building footprints on the masterplan have been dictated by the levels and existing tree locations.

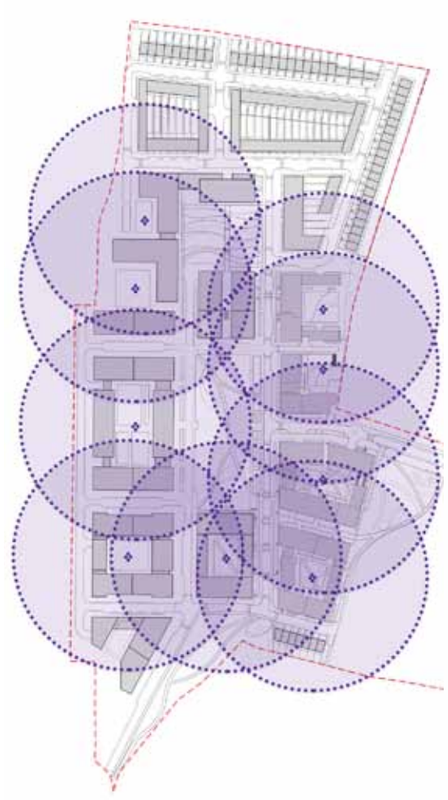
The masterplan has three main public parks with an overall size of 22,680 sqm. The phase one park remodels the existing retention pond and retains its function as a sustainable drainage system collection point and an important habitat site. The lake and park become a valuable teaching resource for the adjacent School.

The Central Park South of the community building provides a suburban park that is level in gradient and provides a large amount of green space. The adjacent public realm is shared surface taking the parkland to the edge of the residential buildings. Central Park North deals with a steep gradient with the introduction of an amphitheater and tiered gardens.

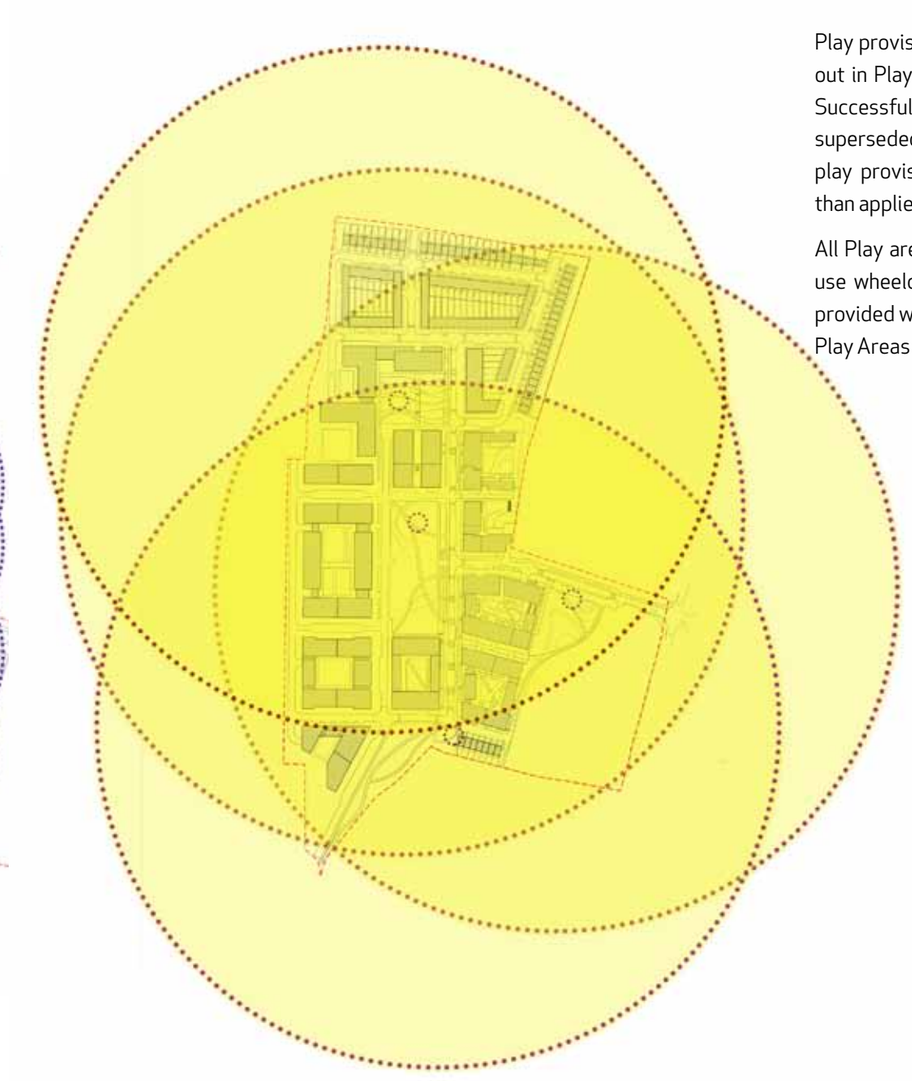
Ample play provision is provided with four Locally Equipped Areas of Play all within 400m of the residential dwellings. Doorstep Play provision is provided within the communal courtyards to the residential development within 100m. All residential houses have back gardens.

The masterplan uses terracing on main routes to provide level access into residential properties and create green streets.

Site wide Masterplan



0-5 year old play [doorstep play]- 100m catchment area



5-11 year old play - 400m catchment area

Play provision will implement the best practice guidance set out in Play England's "Design for Play: A Guide for Creating Successful Play Spaces (2008 or as subsequently revised or superseded). Elements of 'Natural Play' should ensure that play provision is embedded within the environment rather than applied as a separate, discreet entity.

All Play areas should be accessible to children and carers who use wheelchairs. Wheelchair accessible play items shall be provided within the Neighbourhood Play Areas and Doorstep Play Areas

Interactive Play

Site wide Play Provision

01 Play
The proposed development would provide a total of 28,825 sqm of usable open space including play space.

Provision for all 0-5 year olds and all 5-10 year olds would be brought forward with a mix of Doorstep Playable Space and Neighbourhood Playable Space. The total neighbourhood play space is 2517sqm with a further 2532sqm of doorstep playable space in communal courtyards.

There is no specific provision for 11 years and older children on the site. However, the proposed artificial turf 3G pitch and multi-use games area would be available for use by the wider community outside of regular school hours including school holidays. In addition to this the New Southgate recreation ground is less than 600m from the site and is well equipped with formal and informal recreation for older children.

Play provision should meet the standards for quantity, quality and accessibility set out in "Shaping Neighbourhoods: Children and Young People's Play and Informal Recreation" (GLA draft SPG, 2012 or as subsequently revised/superseded). Doorstep Playable Space is provided within each residential block and development phase within the travel distances stated in the GLA Guidance.

Neighbourhood Facilities targeted at children aged 0-11 are provided in 4 locations and are within the travel distances stated in the GLA Guidance.

2 Neighbourhood play area are within phase 1 of the development within the Lakeside Park and to the south of the central spine road with the 2 additional areas following in subsequent phases.

Play provision will implement the best practice guidance set out in Play England's "Design for Play: A Guide for Creating Successful Play Spaces (2008 or as subsequently revised or superseded). Elements of 'Natural Play' should ensure that

Site wide Masterplan

Tree Retention, Proposed and Removal Plan

Photos of Existing Trees

Trees

01 Tree Retention

The sites many existing trees are seen as an asset and their positions have help define the masterplan. Residential blocks have been relocated and existing levels respected to retain many trees whether they be the 30m high Leylandii adjacent to the rail tracks on the western boundary or the more ornamental and native species to the east.

Existing trees that cannot be retained should only be felled when necessary to facilitate the construction. Felling should be programmed to minimise seasonal impacts on wildlife such as potential for nesting birds.

Existing trees that are to be retained shall be protected at all times in accordance with the requirements of BS5837 (2012 or as subsequently amended). Trees to be retained shall include all those highlighted on the Planning Application's arboricultural survey schedules and drawings for retention. Remediation and management measures should be carried out in accordance with the accompanying programme of tree management works and in accordance with Arboricultural Association published best practice.

To ensure all trees that can be retained through the development are fully protected during and after the construction phase, and that tree management works are carried out in accordance with best practice to ensure trees are safe, healthy and provide the optimum habitat and landscape amenity.

Some existing trees with TPO's have been lost since 2015 due to strong winds.

Site wide Masterplan

Sustainable Drainage Plan Diagram

Outline and Detailed Application

01 **Sustainable Drainage**

Integrated into the landscape is a Sustainable Drainage System (SuDS) to promote a more natural approach to surface water management and improve drainage and impact by slowing down runoff by directing into areas of suitable planting. The areas of planting are designed as rain gardens to allow water retention at a low level to prevent creating anaerobic conditions. Water that is not used by tree and plants is slowly released into the surrounding soil or to the retention pond.

Trees in the hard landscape will be planted in soil cells with drainage points allowing the same movement of surface water runoff.

The combined drainage/landscape is a more natural approach to drainage and slows surface water runoff to help prevent downstream flooding, break down pollutants, retain on site water to be used by trees and plants and help increase biodiversity.

Planting mixes in the rain gardens are chosen to cope with dry and wet conditions.

Surface water in residential courtyards in attenuated below paving to allow a slow controlled release into the attenuation pond.

Green roofs on buildings are part of the SuDS strategy and promote a more natural drainage system by slowing down runoff, evaporation and transpiration, and watering the rooftop planting.

Site wide Masterplan

Masterplan showing Outline Application and Detailed Application Site

Outline and Detailed Application

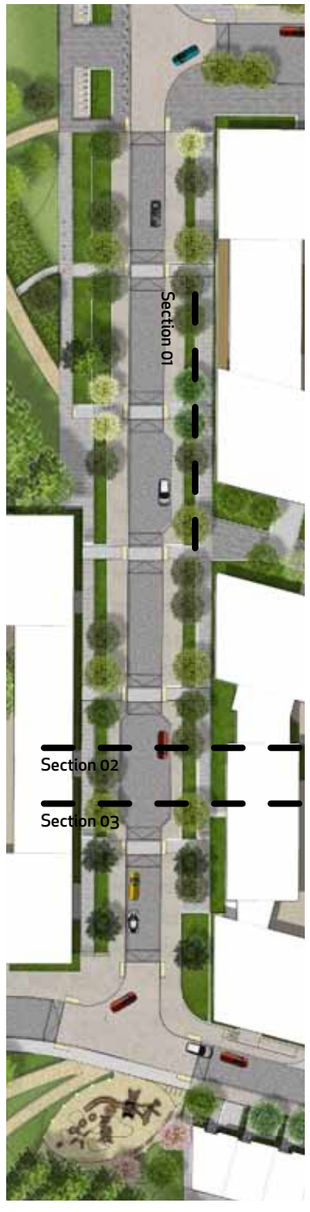
01 Hybrid Application

Phase 0/1 of the development is submitted for detailed planning application and the wider masterplan site is submitted for outline planning.

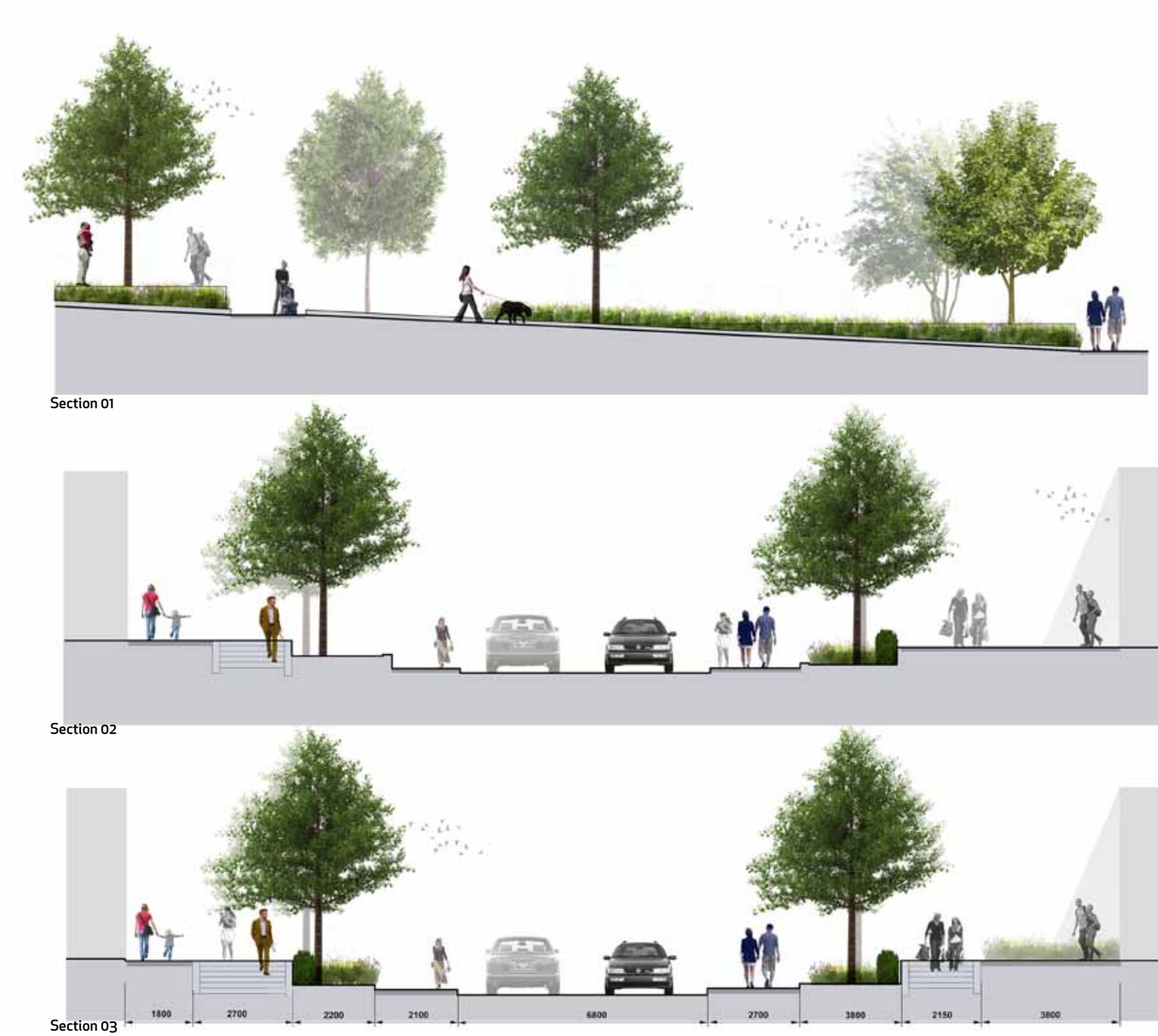
The Detailed Application site includes the new School (Phase 0) and associated all weather pitch for School and community use, indoor sports pavilion and playgrounds, and Phase 1 with 4 residential blocks and communal courtyards, 7 houses and the lakeside park.

Phase 1 includes parkland adjacent to the School, 2 areas of Local Play, 4 residential courtyards and the central pedestrian, cycle and vehicular route.

Detailed Application Phase 1



Plan of The Parkway



Section 01
Section 02
Section 03
Sections through The Parkway

Primary Roads

01 **The Parkway, New Brunswick Avenue**

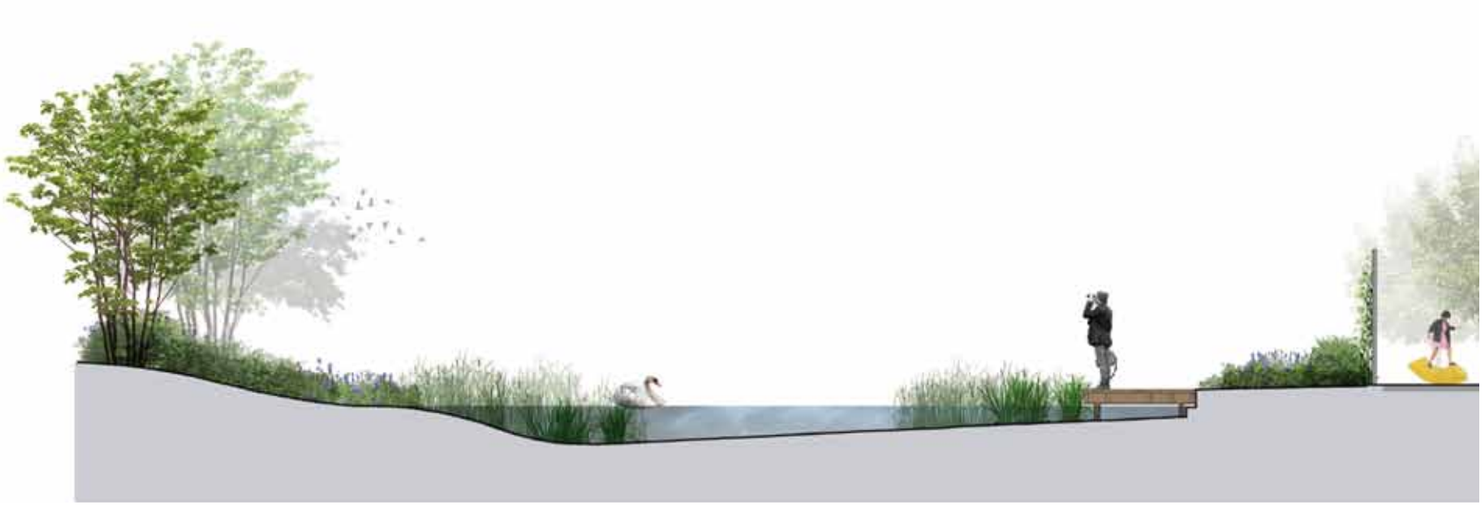
The streets running north to south tend to rise in gradient towards the north and streets running east to west tend to have a lesser gradient. A variety of tree species are proposed for the streets to prevent an 'urban style' streetscape and create a more naturalistic planting type reinforcing the suburban qualities of the site with tree forms addressing the architecture.

The Parkway forms the main movement spine of the site and addresses the site gradient. A level raised crossing point is created at every 1m rise to allow level access into the residential dwellings and to provide vehicular speed management. The change in gradient is picked up by landscape terraces. Drop-off and delivery bays are incorporated into the roadway.

New Brunswick Avenue provides the main link from the east of the site and is aligned to maximise the retention of many existing trees to the north and minimise disruption to the south.

New Brunswick Avenue has a pull in layby adjacent to the Lakeside Park for School use and the road rises to meet The Parkway. The avenue leads the eye from east to west closing with the vista of Central Park South.

Detailed Application Phase 1



Parkland

01 **Lakeside Park**

The Lakeside park establishes the first green dominated space when entering the site from Brunswick Park Road and has an area of 3455sqm. A Locally Equipped area of Play is located to the North of the park which is overlooked by residential properties in Block D and the road. The location provides an opportunity from parents bringing children to School to utilise the play equipment before or after school or during with younger siblings.

The SuDS lake is remodelled to retain most of the existing trees and to allow a direct route to be established. The remodelling allows for the edges to be planted and the creation of a more habitat friendly lake than the existing concrete edges that currently exists.

Pedestrian links are established providing greater permeability through the site connecting primary routes.

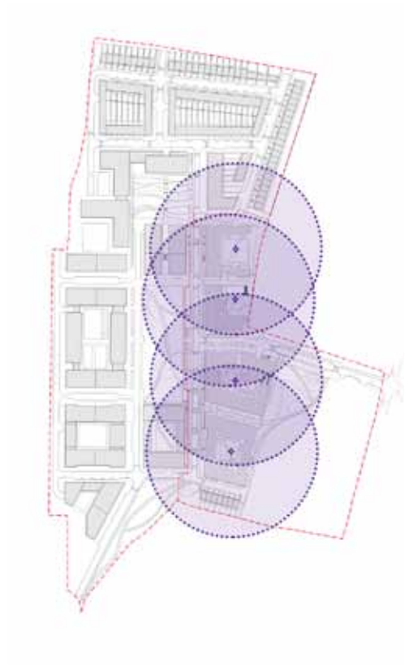
Materials are chosen to reflect the colours and feel of the park and seek to use gravels and timber where appropriate.

The play area is proposed to be enclosed due to the proximity of the road and lake.

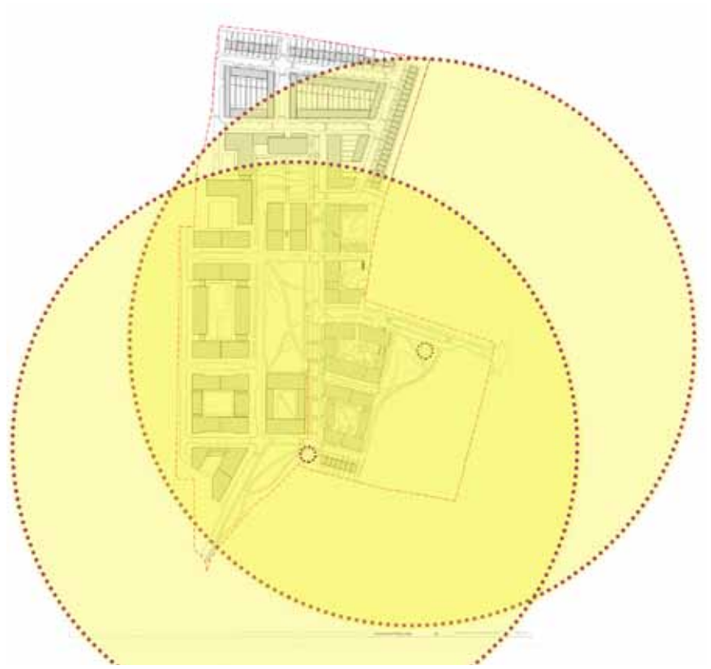
To establish the parkland as wildlife friendly the planting is based around native and naturalised species. With a variety of trees and species rich grassland including common wildflowers such as daisy, white clover, black mendick, lesser trefoil, mouse-eared chickweed and speedwell.

Labels to Diagrams

Detailed Application Phase 1



0-5 year old play [doorstep play]
100m catchment area



5-11 year old play
400m catchment area

Play Strategy

01 Neighbourhood Areas of Play and Doorstep Play

Within Phase 1 an equipped Neighbourhood Area of Play is located within the Lakeside Park adjacent to New Brunswick Avenue with an area of 450 sqm.

Play equipment and features are chosen to be open to interpretation, flexible in use, and offer opportunities for imaginative play and to be durable and functionally robust using damage-resistant materials (such as timber or stainless steel).

	1 bed	2 bed	3 bed	4 bed
Market and Intermediate Units	120	210	91	10
Social Units	0	0	0	0

Total Units	**431**

Geographic Aggregation	**London**
PTAL	**PTAL 0-2**

(persons)

	Market & Intermediate	Social	Total
Ages 0, 1, 2, 3 & 4	79.9	0.0	79.9
Ages 5, 6, 7, 8, 9 , 10 & 11	54.6	0.0	54.6
Ages 12, 13, 14 & 15	15.8	0.0	15.8
Ages 16 & 17	8.3	0.0	8.3
18-64	753.0	0.0	753.0
65+	17.9	0.0	17.9
Total Yield	**929.6**	**0.0**	**929.6**

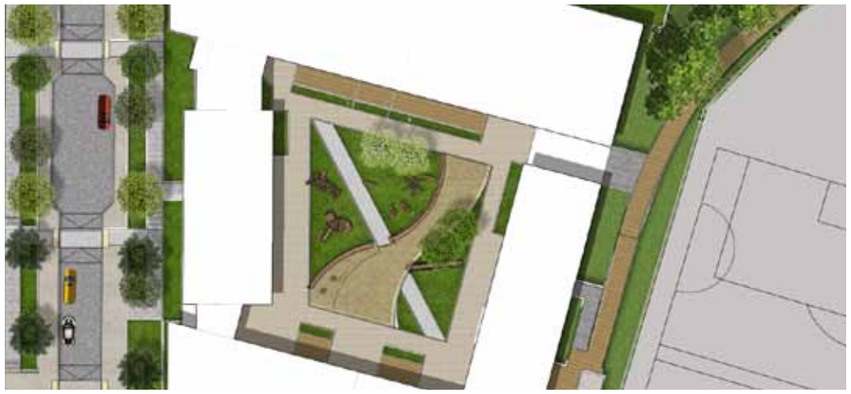
Play Space Calculator

Total Children	**158.6**

	Benchmark (m^2)	Total play space (m^2)
Play space requirement	10	1586.2

Exploration - an important part of play for younger children

Neighbourhood Areas of Play integrated into the wider Parkland



Illustrative View of Block C Courtyard

Illustrative View of Block E Courtyard

Illustrative View of Block D Courtyard

Illustrative View of Block F Courtyard

Doorstep Play integrated into Internal Courtyard

Courtyard Planting creating Sensory Experiences

Detailed Application Phase 1

Doorstep Playable Space will be located within communally managed areas where access will be controlled and limited to residents of the Block and their guests. These play areas will form part of the courtyard space and will not need to be fenced. As described in evidence set out in Play England and GLA guidance, unfenced areas also help to encourage more diverse and exploratory play, which is more valuable, engaging and stimulating for children and carers.

Design will follow the GLA's Guidance, and will generally include features or equipment that clearly signal to children (and adults) that the space is suitable and available for children to play. Each will also include seating for parents or carers and planting that can engage children.

Doorstep Playable Spaces will typically include features targeted at the under-5 age-group. This will include some age-appropriate play equipment, but also integral features for climbing or balancing (blocks, rocks or low walls, edges to lawns or planters etc.), mown grass (with clover, daisies and similar where appropriate), child-scale seats, dens or shelters, changes of level that can create 'king-of-the-castle' opportunities, or simple shapes or stepping stones within the paving pattern.

Detailed Application Phase 1

Type 1
Public realm: concrete conservation paving block
300 x 600 x 80 mm - Mixture of 2 tone of grey

Type 2
Pedestrian cross: concrete conservation paving block
100 x 100 x 80 mm - Sliver grey

Timber decking
Timber walkway in open space

Type 3 - Pedestrian path: concrete conservation paving block
200 x 400 x 80 mm - Mixture of 2 tone of grey

Type 4 - Pedestrian path: concrete conservation paving block
400 x 400 x 50 mm - Sliver grey

Resin bound gravel
Pedestrian path in open space

Materials

01 **Hard Landscape**

Materials Selection

The development is designed with the aim of bringing the wider community together - improving continuity and permeability as well as access to new facilities. The materials selected for use in the landscape reflect this approach do not set the development apart from the wider context.

Materials are selected for their durability and functionality as well as their appearance and preference is given to materials and techniques which utilise recycled and recyclable materials and minimise energy and resource use throughout their lifecycle. The BRE's Green Guide to Specification is used as guidance, but it is recognised that it is not comprehensive for landscape materials.

Principal landscape materials consist of, but not limited to the following:

Pre-cast concrete flags and blocks with exposed recycled aggregate (e.g. copper slag, china clay waste etc).

Resin bonded gravel for parkland areas

Timber (FSC Chain of Custody) for areas of decking and courtyard terraces

Stainless steel – high recycled content and recyclable

London Brick – UK sourced and manufactured, to match buildings - vertical surfaces of planters and walls.

Fair-faced in-situ concrete - for low walls and seating elements

Acer campestre 'Elsrijk'
Field Maple 'Elsrijk'

Prunus avium
Wild Cherry

Betula utilis 'jacquemontii'
West Himalayan birch

Sorbus aucuparia
Rowan

Alnus glutinosa 'Imperialis'
Alder

Quercus robur
English oak

Carpinus betulus 'Frans Fontaine'
Hornbeam

Amelanchier lamarckii
Robin Hill

Prunus serrula
Tibetan cherry

Ginkgo biloba 'Fastigiata'
Maidenhair Trees Fastigiate

Pinus sylvestris
Scots Pine

Detailed Application Phase 1

Materials

01 Soft Landscape - Trees

The soft landscape design and planting proposals aim to soften the built environment and create an attractive environment and help reinforce the existing mature tree structure.

The Parkway and New Brunswick Avenue are planted with a variety of tree species to allow more informal suburban feel.

Main street tree species are a mixture containing ,Alnus glutinosa 'Imperalis' (Cut leaf Alder), Acer campestre 'Elsrijk' (Field Maple), Carpinus betulus 'Fran Fontaine', Pinus sylvestris and Prunus species.

Other tree species for the wider landscape include but are not limited to Sorbus aucuparia (Rowan), Amelanchier lamarkii (Snowy Marsipul), Prunus avium (Wild Cherry), and Betula pendula (Birch).

In parkland areas proposals include low growing perennial species within the grass sward, and planting throughout should be aimed at significantly increasing nectar, pollen and other food sources for a range of invertebrates. Where native plant species are not best suited to the conditions, non-native or ornamental species should be used which are visually attractive, but also offer benefits to biodiversity (for example, by increasing winter nectar supply or providing nesting sites for song-birds), and other sensory features (fragrance, movement etc.)

The soft landscape is designed to promote the environmental, and social benefits of good planting design across the entire development.

Detailed Application Phase 1


Liriope muscari


Vinca minor alba

Planting Mix A and B


Ajuga reptans Atropurpurea


Anemone japonica Honorine Jobert


Campanula portenschlagiana


Hemerocallis Cartwheels


Rosmarinus officinalis


Lamiastrum galeobdolon

Planting Mix C


Narcissus February Gold


Narcissus Glacier


Narcissus pseudonarcissus


Crocus Snow Bunting


Allium 'Gladiator'

Bulb/Corms and Tubers


Allium schoenoprasum


Lotus corniculatus


Petrorhagia saxifraga


Prunella vulgaris


Sedum acre


Sedum album

Typical Extensive Roof Species

Materials

01 Soft Landscape - Planting Mixes

The soft landscape design and planting proposals aim to soften the built environment and create an attractive environment and help reinforce the existing mature tree structure.

The implementation of the landscape proposals will enhance the biodiversity. The biodiverse lawns, ornamental planting and tree planting will provide habitats and increase connectivity helping to create wildlife corridors. A preference for fruiting and flowering plants will be selected to provide food sources for invertebrates and birds.

The development presents opportunities for integral bat and bird nest and hibernation sites. These can be provided in a range of locations with differing sizes, aspects and heights (all safe from cat predation) in-line with the London Biodiversity Action Plan (BAP) highlighted species including the House Sparrow, Dunnock and Starling.

Two extensive green roofs are proposed for the Schools sports pavilion and changing block. The extensive green roof system is drought tolerant and relies on Sedum species to provide year round coverage.

Brown roofs are proposed for the residential blocks and present opportunities for iconic birds such as Black Redstart (RSPB amber list and BAP species) and Peregrine Falcons as well as nectar sources and other forage and nest sites for invertebrates. Swift can be encouraged by the positioning of swift boxes on the taller buildings

Detailed Application Phase 1


Achillea ptarmica


Angelica sylvestris


Eupatorium cannabinum


Filipendula ulmaria


Geum rivale

Typical Wildflower Species in Pond Edge Mix


Hypericum tetrapterum


Iris pseudacorus

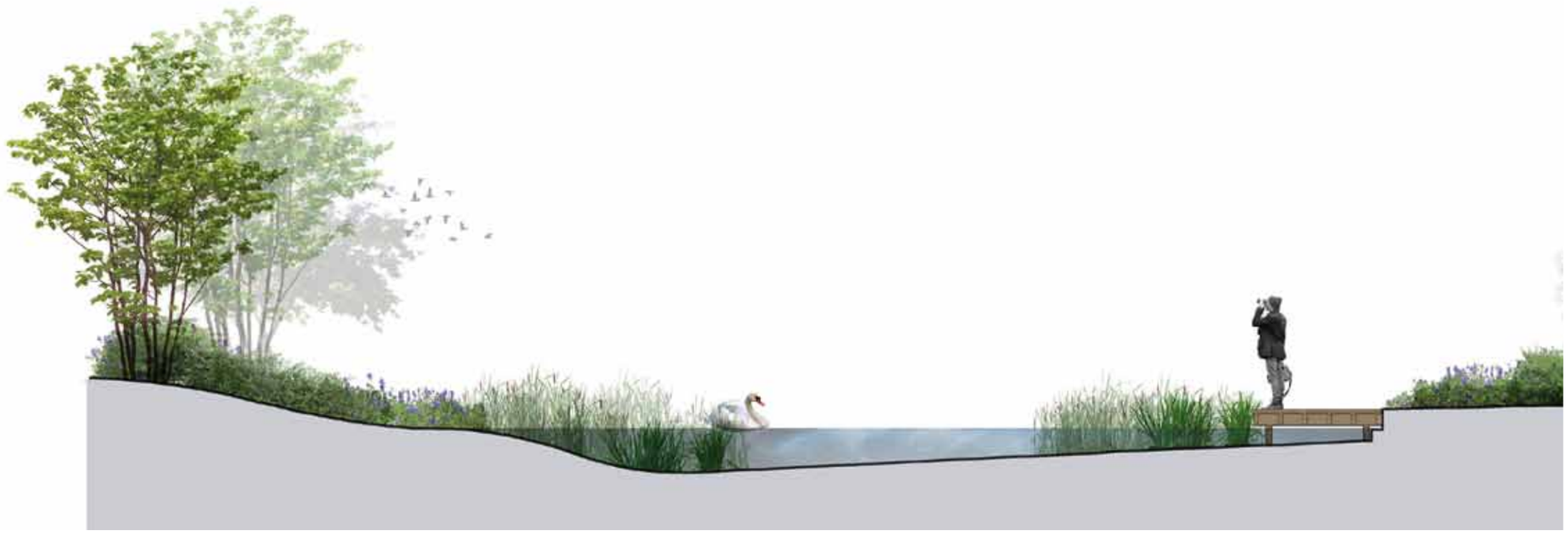

Lotus pedunculatus


Pulicaria dysenterica


Lycopus europaeus


Scrophularia auriculata

Typical Grass Species in Pond Edge Mix

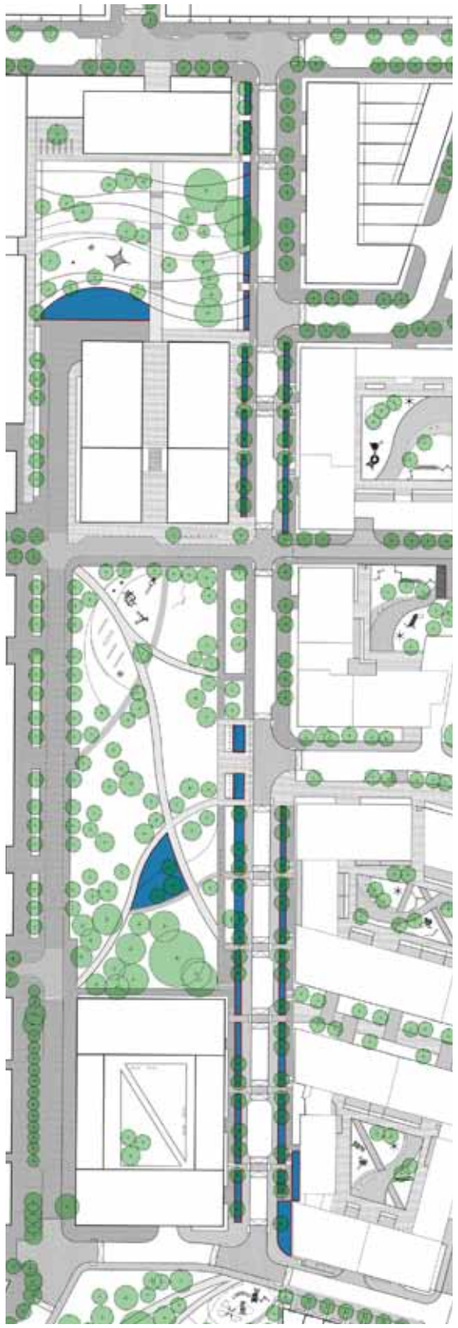


Materials

01 **Soft Landscape** - Wetland Edge

The remodelled Sustainable Urban Drainage lake provides the opportunity to increase the biodiversity from the existing condition.

A wetland grass and wildflower mix is proposed to bring



Rain and stormwater wash pollution down street gutter into rain garden.

Water spreads into rain garden where plants trap litter and coarse sediment.

Water seeps down through rain garden trapping finer sediment and pollutants

Cleaned stormwater collected in pipes and flows to the Bay.

Rain Gardens Plan Diagram

Precedents images of Rain Gardens

Detailed Application Phase 1

Materials

01 **Soft Landscape** - Rain Gardens

Rain gardens are a major part of the SuDS drainage solution that collects rain water and uses the vegetation to filter out pollutants. Also called Bio-retention ponds , rain gardens have several advantages for the environment such as the opportunity to grow a wide range of perennial plants attracting insects and birds, reduce erosion, increase absorption of water and reduce flow exiting the site during heavy rainfall. The rain gardens of the site are located along the Parkway of Phase 01 with all trees in hard landscape being planted using soil cells that include surface runoff retention .

Detailed Application Phase 1

High quality finishes - communal entrances and special areas

LED lighting offers energy efficiency, excellent colour rendering and dimming control options

Lighting

01 Lighting

Lighting within the public realm should generally be low key and unobtrusive. General street and footpath lighting should be designed to adoptable standards, featuring 'white' light sources to aid colour rendering. Lighting levels need to be safe and appropriate for a residential area, but not excessive or the cause of undue disturbance or 'light pollution'.

Higher levels of illumination and subtle use of coloured lighting should be considered to highlight principal public realm areas and locations where CCTV is in use if required. The areas appropriate for such enhanced lighting are:

- The School – increased lighting levels signify the social importance and potential for high levels of use
- The shared surface to the frontage of the Community building .

Secondary, localised lighting enhancements to lighting may include the following locations:

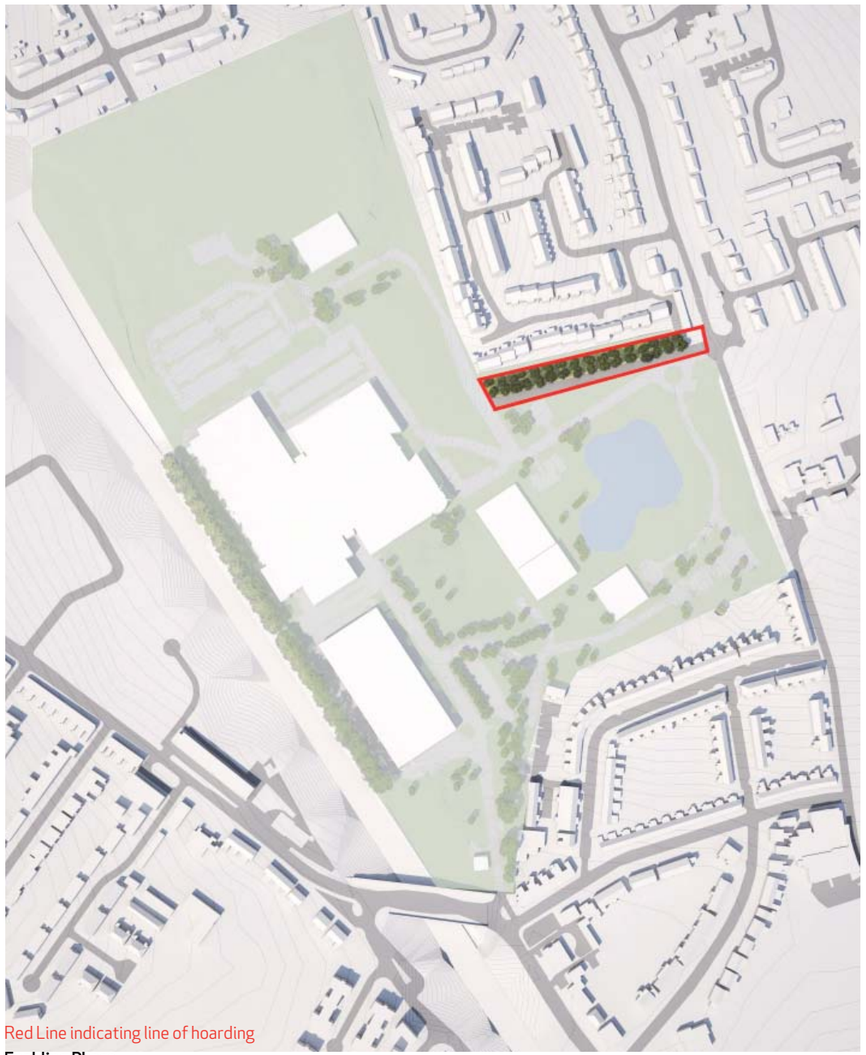
- Public seating areas (public and communal areas)
- Communal Entrances to courtyards and blocks

Light fittings should facilitate dimming programmes (or be capable of modification to facilitate dimming) and operate on lowest feasible energy consumption.

Lighting within Communal Courtyards and Gardens should generally conform to the street lighting criteria set out above with regard to low energy use, and designs should incorporate the capability to reduce illumination during the early hours. Lighting may comprise low columns and/or bollard, bulkhead and wall-mounted lighting, but must not permit direct visibility (and glare) of light sources from 1st floor windows.

11.0 | Phasing

Delivery & Implementation



Red Line indicating line of hoarding

Enabling Phase
Construction of New Entry Road

Phase 1.1
Construction of New School to Brunswick Road

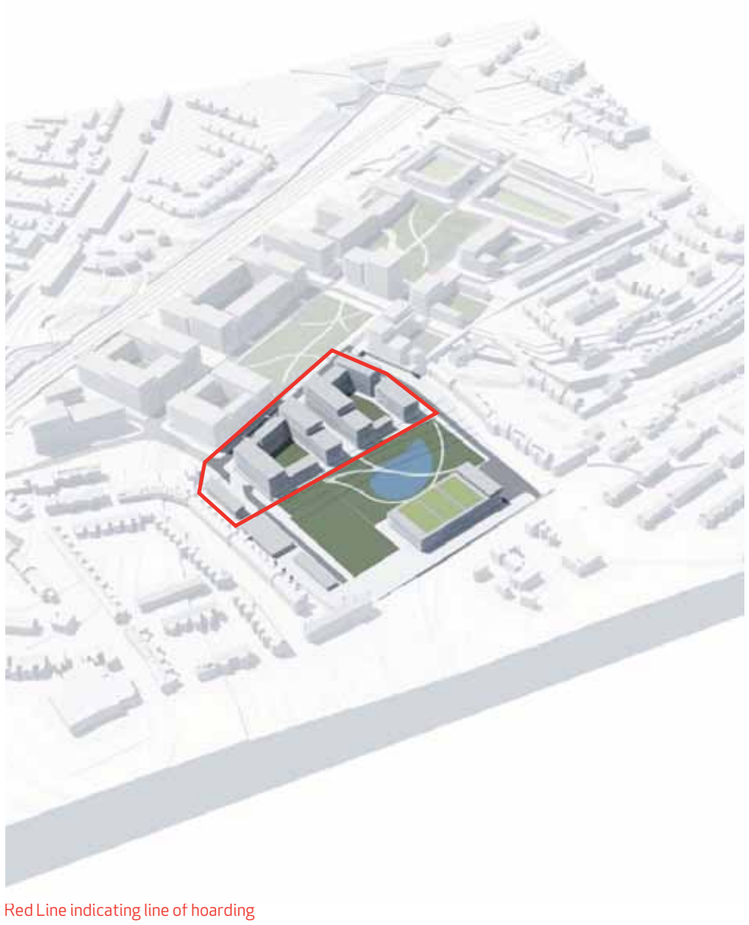
The masterplan is of a size that it requires a clear phasing strategy. This strategy needs to adopt a number of guiding principles:

- Delivery of a manageable quantum of residential units, as it relates to developer funding, local demand uptake, manageability of site operations etc.
- Delivery of amenity in parallel with the delivery of units (ie. puttin in place a reasonable level of shared amenity up-front)
- Delivery of later phase in such as way that they do not impinge or harm early phases units (eg. Construction traffic)

In particular this masterplan needs to:

- Work around existing leases, respecting expiration dates of leases and rights of access implied in the lease
- Acknowledge time is tight for the delivery of the School and needs to happen early in the development

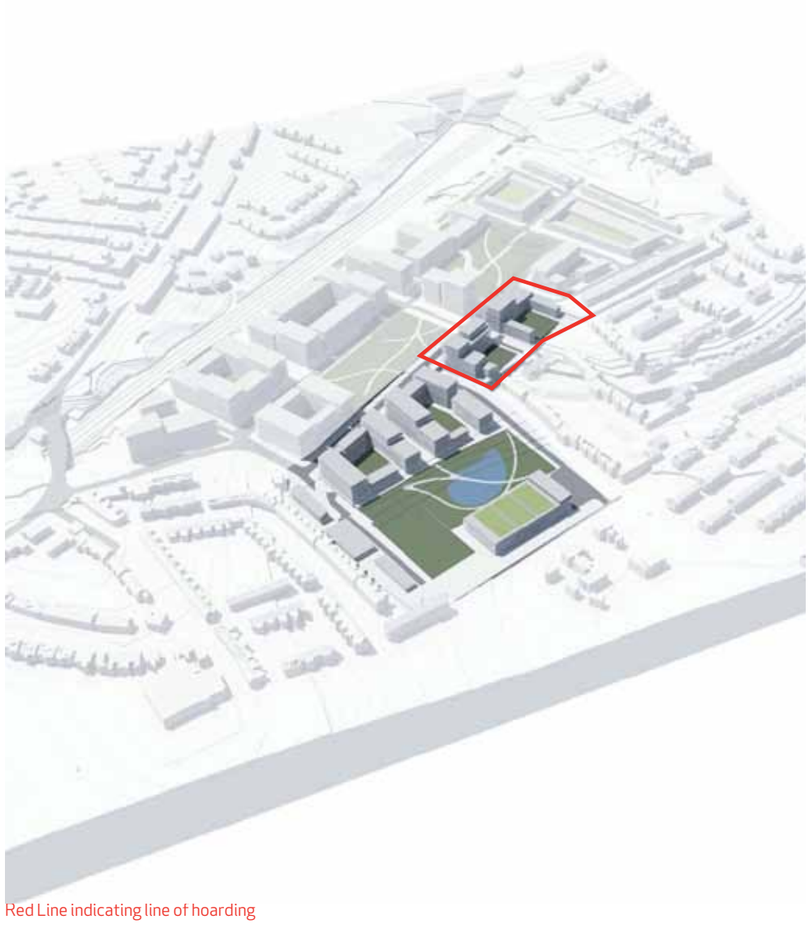
Delivery & Implementation



Red Line indicating line of hoarding

Phase 1.2

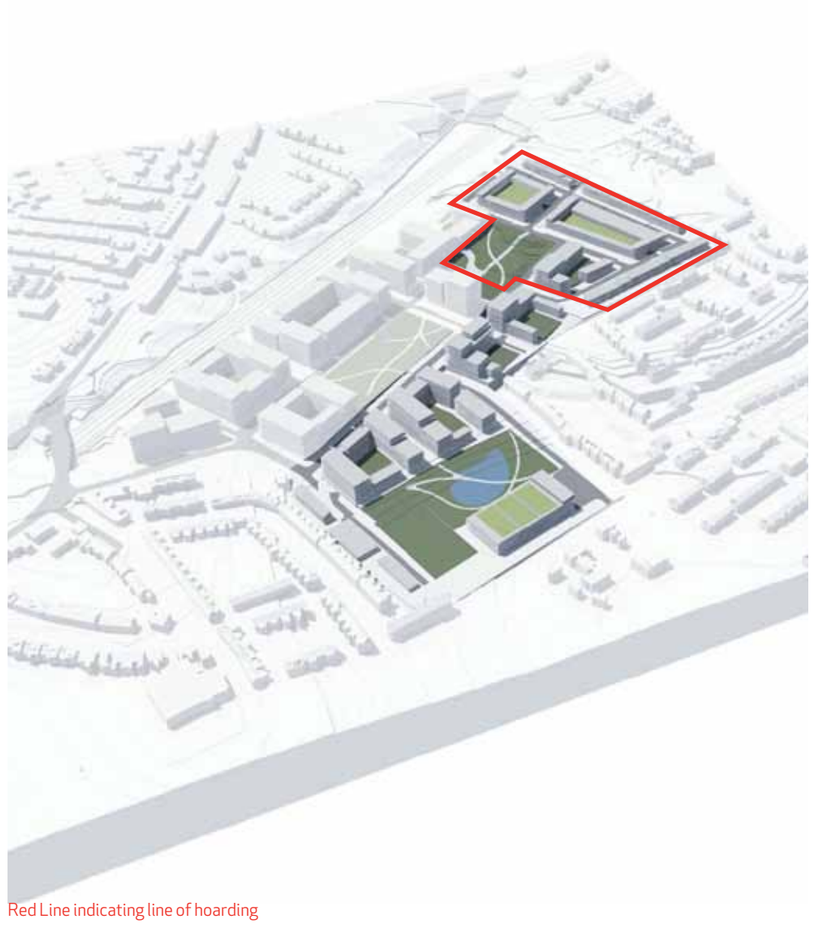
Construction Residential Blocks 1B, 1C, 1D



Red Line indicating line of hoarding

Phase 1.3

Construction Residential Blocks 1E, 1F

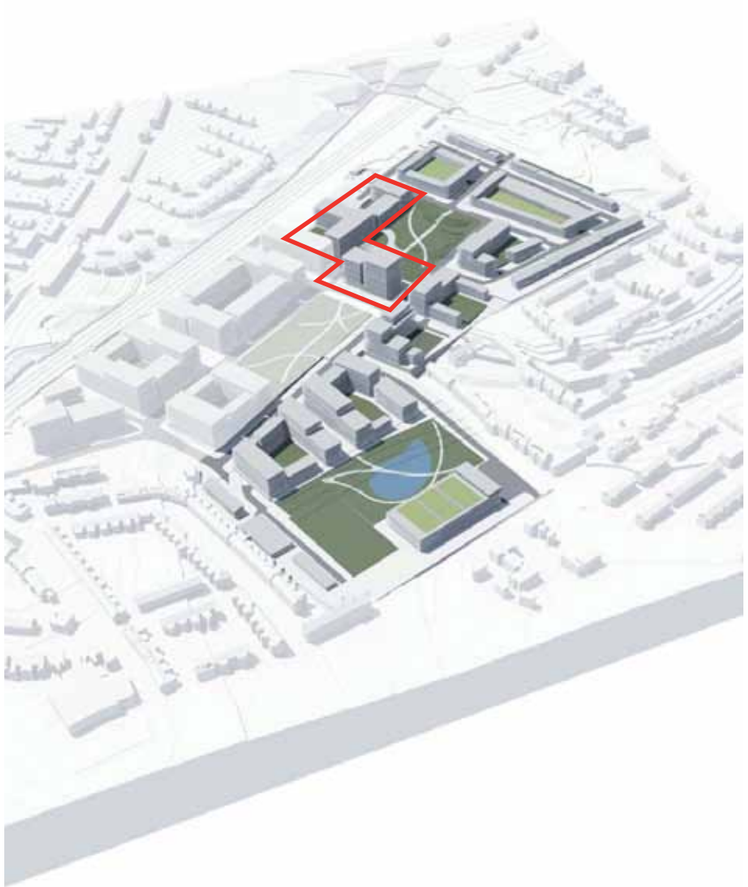


Red Line indicating line of hoarding

Phase 2

Construction Residential Blocks 2A, 2B, 2C, 2E & 2F

Delivery & Implementation



Red Line indicating line of hoarding

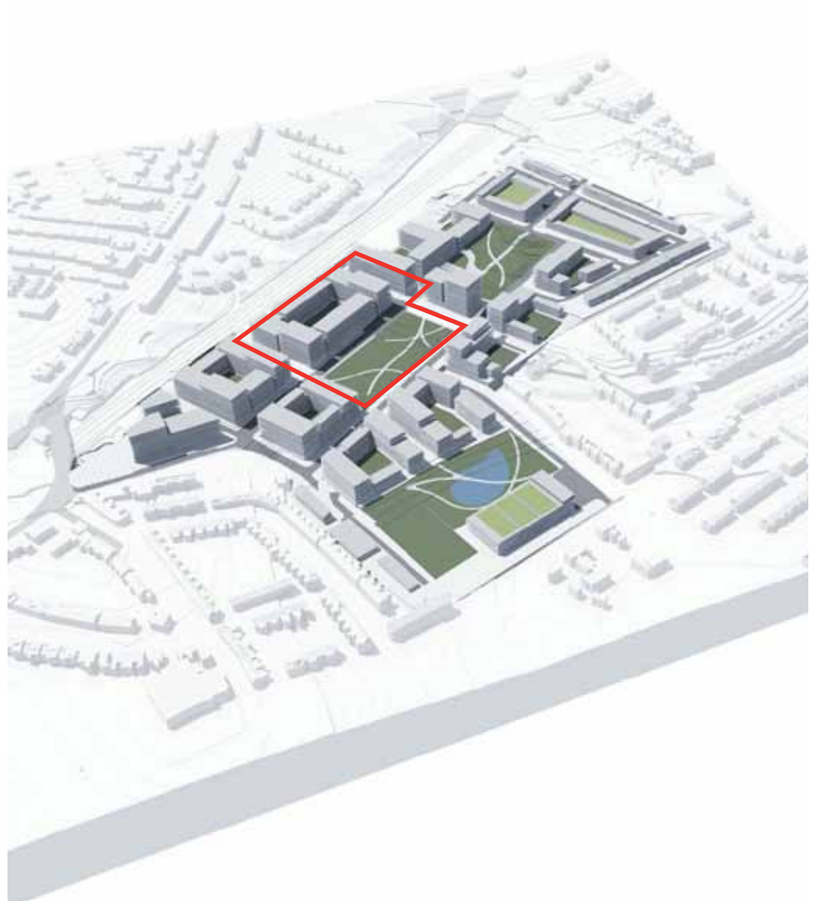
Phase 3

Construction Residential Blocks 3A, 3B

Red Line indicating line of hoarding

Phase 4

Construction Residential Blocks4A, 4B, 4C



Red Line indicating line of hoarding

Phase 5

Construction Residential Blocks 5A, 5B

12.0 | Secure by Design Statement

Section 1 The Development – Layout & Design (Planning Issues)

Layout of roads and footpaths

Vehicular and pedestrian routes have been designed to be visually open, direct, well used and do not undermine the defensible space of neighbourhoods. Design features have been employed to help identify acceptable routes through a development, thereby encouraging their use, and in doing so enhance the feeling of safety.

Such features include:

1. Clear Material Separation of public (pedestrian) routes
2. Separation of public (pedestrian) routes from building edges with planted privacy zones 'defensible space' (typically 2m)
3. It is noted the highways are detailed with features that psychologically give the impression of a private managed estate, such as rumble strips & changes in road surfaces.

Details of roads and footpaths can be understood in the application landscape drawings, a selection of which are included in Appendix B.

Through-roads and cul-de-sacs

The masterplan contains two principle entry and exit points for vehicular traffic, which augment the existing entry and exit points at Oakleigh Road South and Brunswick Park Road.

The re-opening of a connection to Weirdale Avenue at the North of the site is proposed for pedestrian, cycle and emergency vehicular traffic only. It is felt that excessive permeability has not been introduced into the masterplan area and the augmentation of existing routes and patterns of movement are justified.

It is noted that the planning of blocks is generally secure perimeter courtyard typologies and care has been taken to allow no access to rear or side boundaries of dwellings. In accordance with CABE guidance the masterplan proposes 'paths and pavements that run as part of the street to the front of dwellings. This reinforces movement in the right places to keep streets animated and does not open up rear access to properties.'

Footpath design

Routes for pedestrians, cyclists and vehicles have been integrated to provide a network of supervised areas.
Public footpaths do not run to the rear of, and provide access to gardens, rear yards or dwellings.
Segregated footpath have been provided in areas that traverse parkland and public open space. IN these instances the design of these paths is guided by the following principles:

- as straight as possible
- wide
- well lit
- devoid of potential hiding places
- overlooked by surrounding buildings and activities
- well maintained so as to encourage surveillance along the path and its borders

Physical barriers, such as planter beds, have been put in place where 'desire' lines place pedestrians in potential danger, such as at road junction between the Parkway and Brunswick Park. The pedestrian has good visibility along the route of the footpath.

Planting next to a footpath

Planting next to footpaths can be understood in the application landscape drawings, a selection of which are included in Appendix B. The following features can be observed in the drawings:

1. Footpaths are wide and generous throughout the development
2. Planting beds are well contained, with kerb edging
3. Planting plans generally start with low growing plants adjacent to footpaths, with taller shrubs and tree to the rear.

These features achieve a well contained and well defined planting edge avoiding planting that grows over the path creating pinch points, places of concealment and unnecessary maintenance.

Where footpaths run next to buildings or roads the path are open to view. This will influence the choice of species and the density of planting. Public footpaths do not run immediately next to doors and windows, buffer zones are provided, at a minimum width of 2m, to separate a path from a building elevation.

Section 1 The Development – Layout & Design (Planning Issues)

Seating next to a footpath

Public seating is not provided within the development to avoid potential issues of loitering and antisocial behaviour. A café/ retail space is proposed central to the development within Brunswick Park. This may provide private seating & table areas for customers, however these will be managed by the unit and removed when not in use.

Lighting of footpaths

All public footpath areas will be provided with lighting. The provision of lighting, in combination with the masterplan strategy of a high degree of natural surveillance in the design provision of perimeter courtyard blocks ensures that no areas of footpath that will be lit at night but not subject to passive surveillance by dwellings will be avoided.

Footpaths that are to include lighting will be lit to the relevant levels as defined in BS 5489:2013. Lighting design will look to avoid conflict between lighting and tree canopies

Footpaths on phased developments

The implementation of the later phases of the masterplan will identify where the areas where it may be best to safeguard the land required for the footpath link, but fence it off and not actually construct the path until such time as the full connection can be made. This is to avoid in the short to medium term the creation of an underused and possibly isolated movement route.

Communal areas

A key feature of the Masterplan is the provision of high quality, open and generous new parkland and public amenity space. The principle spaces include:

1. New Brunswick Park (South)
2. New Brunswick Park (North)
3. Brunswick Lakeside Park
4. New Brunswick Avenue
5. Oakleigh Avenue

It is acknowledged that these areas and areas within them such as playgrounds, have the potential to generate crime, the fear of crime and anti-social behaviour. All open spaces have been designed with the following design characteristics:

1. High level of enclosure & supervision from adjacent residential buildings
2. Provision of open, highly visible and well-lit circulation routes within the open spaces
3. Clear definition of public open space, privacy strips (planted boundary) and private dwellings
4. Open spaces are not residual or marginal spaces, but spaces framed by buildings
5. Furthermore, it is noted that the Developer intends to run and maintain a private shuttle bus service, afforded to residents through the management service charge. The developer has precedent for this shuttle bus service in their development at Princess Park Manor in Friern Barnet. Buses and their drivers act as a means to continuously supervise the estate, traversing all roads within the estate at frequent intervals through-out the day.

Section 1 The Development – Layout & Design (Planning Issues)

Dwelling Boundaries: Front Boundaries

The masterplan takes Secured by Design Principles to front and rear aspect to buildings: building needs two faces: a front onto public space for the most public activities and a back where the most private activities take place. This principle is applied consistently, streets are overlooked by building fronts, improving community interaction and offering surveillance that creates a safer feeling for residents and passers-by. For the apartments and terraced houses within the masterplan dwelling frontages are open to view- walls, fences and hedges are kept low or feature a combination of wall (maximum height 1 metre) and railings or fence.

Front garden planting of feature shrubs and suitable trees are provided set back from paths and placed to avoid obstructing visibility of doors windows.

For the terraces housing typology within the masterplan, front curtilage is substantially hard paved (of a type that is permeable to allow rainwater to easily drain away) to the front of the dwelling, thereby reducing the likelihood of any planting growing to excess and obscuring vulnerable areas.

Side and rear boundaries

For the terraces housing typology within the masterplan, exposed side gardens are substantially avoided. Where provided a robust defensive barriers of a masonry wall to a minimum height of 1.8m is provided.

No rear boundary is exposed within the masterplan.

Sub-divisional boundaries

Sub-divisional fencing design (for terraced dwellings within the development) have not been developed in detail design at this point however will be detailed to provide effective subdivision and discourage lateral movement by persons through the rear curtilage of terraced dwellings.

Layout and Orientation of Dwellings

Dwellings have been positioned facing each other to allow neighbours to easily view their surroundings and thus making the potential offender feel vulnerable to detection.

The masterplan incorporate a wide mix of dwellings, enabling greater potential for homes to be occupied throughout the day. This gives increased opportunity for natural surveillance, community interaction and environmental control.

Section 1 The Development – Layout & Design (Planning Issues)

Gable end walls

The creation of windowless elevations and blank walls adjacent to public spaces has been avoided in the masterplan. Buildings are generally provide in secure perimeter courtyard blocks.

Rear access footpaths

No rear access footpaths are proposed within the terraced typologies within the masterplan. Apartment buildings are generally provide in secure perimeter courtyard blocks. Where courtyard blocks are broken (to allow direct access from courtyard out) these are controlled with secure gates for use by residents only.

Dwelling identification

A strategy for clear naming and/or numbering of properties will be developed to assist residents, postal workers and the attendance of emergency services.

Car parking: surface parking

For the terraces housing typology within the masterplan, cars are parked on hard standing within the front dwelling boundary .

Where communal car parking areas are provided, they are in small groups, close and adjacent to homes and are within view of the active rooms within these homes. Generally communal pcar parking (visitor parking) is provided as parallel parking directly in front and parallel to dwelling blocks.

Rear car parking courtyards are not proposed.

Car parking is not designed to be adjacent to or between units.

Communal parking facilities (principally on-street parallel parking) will be lit to the relevant levels as recommended by BS 5489:2013.

Section 1 The Development – Layout & Design (Planning Issues)

Planting

Planting is employed extensively throughout the masterplan area and is a feature of the masterplan. A separate statement on the relationship between Planting and the security of the development has been produced by the Landscape consultant.

Street Lighting

All street lighting for both adopted highways and footpaths, private estate roads and footpaths and car parks will comply with BS 5489:2013. The DOCO shall be provided with a declaration of conformity to BS 5489:2013 by a 'competent' independent designer.

Section 2 Security of dwelling

Front Door - Front Doorset Standards

Doorsets shall be certificated to one of the following standards:

- PAS 24:2012 (Note 21.1.1 and 21.1.2), or:
- STS 201 Issue 4:2012 (Note 21.1.3), or:
- LPS 1175 Issue 7:2010 Security Rating 2 (Note 21.1.4), or:
- STS 202 Issue 3:2011 Burglary Rating 2 (Note 21.1.4), or:
- LPS 2081 Issue 1:2014 Security Rating B (Note 21.1.5)

Doorsets shall also be certificated to the following relevant material specific standards:

- BS 7412:2007 (PVC-U)
- BS 4873:2009 (Aluminium)
- BS 6510:2010 (Steel)
- BS 644:2009 (Timber)
- BS 8529: 2010 (Composite)

The notes, clarifications and application of Standards noted in the Principles oSecured by Design will be referenced and incorporated in the detail design and specification of the development.

The DOCO will be supplied with proof of certification including the technical schedule (sometimes referred to as 'Scope of Certification') prior to the SBD certificate being awarded.

Doorset installation

Door frames must be securely fixed to the building fabric in accordance with the manufacturer's specifications. The DOCO will be provided with a copy of the manufacturer's specifications.
Doors in recesses more than 600mm deep shall be avoided.

Glazing in and adjacent to doorsets

Any glazing within PAS 24:2012, STS 201 Issue 4: 2012 or LPS 2081 Issue 1:2014 certificated doorsets will incorporate one pane of laminated glass meeting the requirements of BS EN 356:2000 class P1A (this is a requirement within PAS 24:2012). In addition any windows or side lights adjacent to doors (within 400mm) will also include one pane of laminated glass meeting the requirements of BS EN 356:2000 class P1A (minimum).

Outward opening doorsets

Outward opening doorsets installed within SBD developments will specifically form part of the certificated product range.

Section 2 Security of dwelling

Door chains, limiters, door viewers

A door chain or opening limiter will be installed on the doorset to which a caller can be expected, normally the front door.
A door viewer meeting the requirements with the Door & Hardware Federation Technical Specification 002 (TS 002) standard will be fitted between 1200mm and 1500mm from the bottom of the door (not required if the doorset is installed with clear glazing).

Letter plate apertures

Where Letter plates are installed within a door, they will form part of the certificated doorset range.

Surface Mounted Letter Boxes

Where surface mounted letter boxes are to be used (at lobbies to apartment buildings) it will be robust in construction and securely fixed to the external face of the building in accordance with the manufacturer's specifications. It will be located in a position that benefits from natural surveillance.

Communal dwellings - Communal doorset standards

Communal entrance doorsets with a separate adjacent access control panel shall be certificated to one of the following standards:

- STS 202 Issue 3:2011 Burglary Rating 2 (minimum), or
- LPS 1175 Issue 7:2010 Security Rating 2 (minimum), or
- PAS 24: 2012, paragraph 4.4.3 i.e. via testing to BS EN 1627

Resistance Class 3 (minimum). NB Doorsets utilising non mechanical magnetic locks fall outside the scope of BS EN 1627.

Where a glazed vision panel is installed it will form part of the manufacturers certificated doorset range.

Section 2 Security of dwelling

Mail delivery for communal dwellings (flats)

Communal mail delivery facilities within building entrances serving multiple flats or rooms will be designed to incorporate the following:

- Located at the primary entrance/exit point of the building within view, within an internal area covered by CCTV or located within an 'airlock' access controlled entrance hall, or externally at the front of the building within view of those using the building
- Be of a robust construction
- The individual letter boxes shall have a maximum aperture size of 260mm x 40mm
- Have anti-fishing properties
- Fire retardation where considered necessary
- Installed in accordance with the manufacturer' specifications
-

Door entry and Access control systems

Where there are between four and nine residential dwellings sharing a communal entrance the doors will incorporate an access control system, with an electronic lock release and visitor door entry system providing colour images and audio communications linked to each dwelling.
Where there are ten or more residential dwellings sharing a communal entrance, access control systems meeting the following minimum specifications will be required:

1. Developments of 10 to 25 dwellings sharing a communal entrance will have a visitor door entry system that meets the requirements of the Equality Act 2010 (DDA in Northern Ireland), vandal resistant external door entry panel with an integral or remote camera, providing colour images and audio communications between the resident and visitor.
2. Developments of over 25 dwellings sharing a communal entrance will have an access control system as stipulated for developments of between 10 to 25 dwellings, but will also capture (record) images of people using the door entry panel. Additional CCTV cameras will be installed covering the communal entrances and lobby areas, enabling visitors to be viewed from each residential dwelling via a dedicated door entry system handset, digital television, GSM or Wi-Fi enabled device.
3. The resident access control system and associated electric locking mechanisms shall incorporate a battery back-up facility, in the event of a power failure, to enable system operation for a minimum period of 6 hours. In the event of an initial power failure door locks shall remain in the secure mode, however, once the battery back-up ceases to operate the system must revert to a safe (unlocked) mode.
4. Where there are ten or more residential dwellings served by a communal entrance, secondary secure doorsets with complementary access control will be provided on each floor to compartmentalise the blocks.

Flat entrance doorsets served off a stairway

Flat entrance doorsets shall meet the same physical specification as 'front door' (paragraphs 21.1 to 21.6 and 21.8 to 21.15 of the Secured by Design Document).

Flat entrance doorsets will also be fire rated and will be installed with a door closer unit. Any doorset installed with an integral door closer mechanism will have been tested in this configuration; the hardware or ironmongery mortised into the door leaf or frame (integral) will form part of the certificated doorset range.

All glazing in and adjacent to doors shall be installed with a fire rated laminated glass meeting the requirements of BS EN 356:2000 class P1A, securely fixed in accordance with the manufacturer's specifications

Windows

The SBD standards for ground floor, basement and easily accessible windows will be adhered too:

- PAS 24:2012 (Note 28.1.2 and 28.1.3), or
- STS 204 Issue 3: 2012, or
- LPS 1175 Issue 7:2010 Security Rating 1 (see note 28.1.4), or
- LPS 2081 Issue 1:2014 Security Rating A (see note 28.1.5)

All windows will incorporate key lockable hardware unless designated as emergency egress routes.

A | Appendix

The Design of St Andrew the Apostle School

6 ACCESS

6.2 Access and Circulation

Pedestrian & Cyclist Access

Pedestrian and cyclist access is obtained from the east of Brunswick Park Road. This pedestrian access also available from the main entrance to the north, the pedestrian entrance and is segregated from vehicular traffic. Pedestrian and cycle access is available from the west boundary of the site, across the lakeside park. Covered cycle parking is provided adjacent to the sports block, and at the north west corner of the main block. There is also cycle parking in the basement.

Vehicular Access & Parking

Vehicular access is obtained via a large double leaf vehicular gate on the north of the site. There is a one way system so that delivery drivers can pull in to make their delivery and leave, without obstructing any visitors or staff. There is a vehicle barrier to prevent unauthorised access to the basement. There is an intercom to the main office to allow access. The vehicle shutter will be work on a weight sensor in the road which will open when a car approaches. The pedestrian access door to the basement will have a PIN access to prevent unauthorised access. There is a total of 70 spaces in the basement, 5 spaces in the drop off/visitor area. 5 accessible spaces above ground and 3 in the basement, 8 motorcycle spaces and 28 bicycle spaces (in the basement).

All kitchen deliveries, refuse and maintenance access will be granted through the main vehicular entrance. The car park/delivery bay has been tracked for refuse, coach and fire appliance vehicles.

Start/End of school day

In terms of pedestrian access, at drop off and pickup students and staff can gain entry into the site from either the main entrance to the north of the site, the pedestrian ramp and steps off Brunswick Park Road, and the pedestrian access from the lakeside path the north west. Visitors have access through reception only.

Proposed Pedestrian and Vehicular Access and Circulation diagram - Ares Landscape

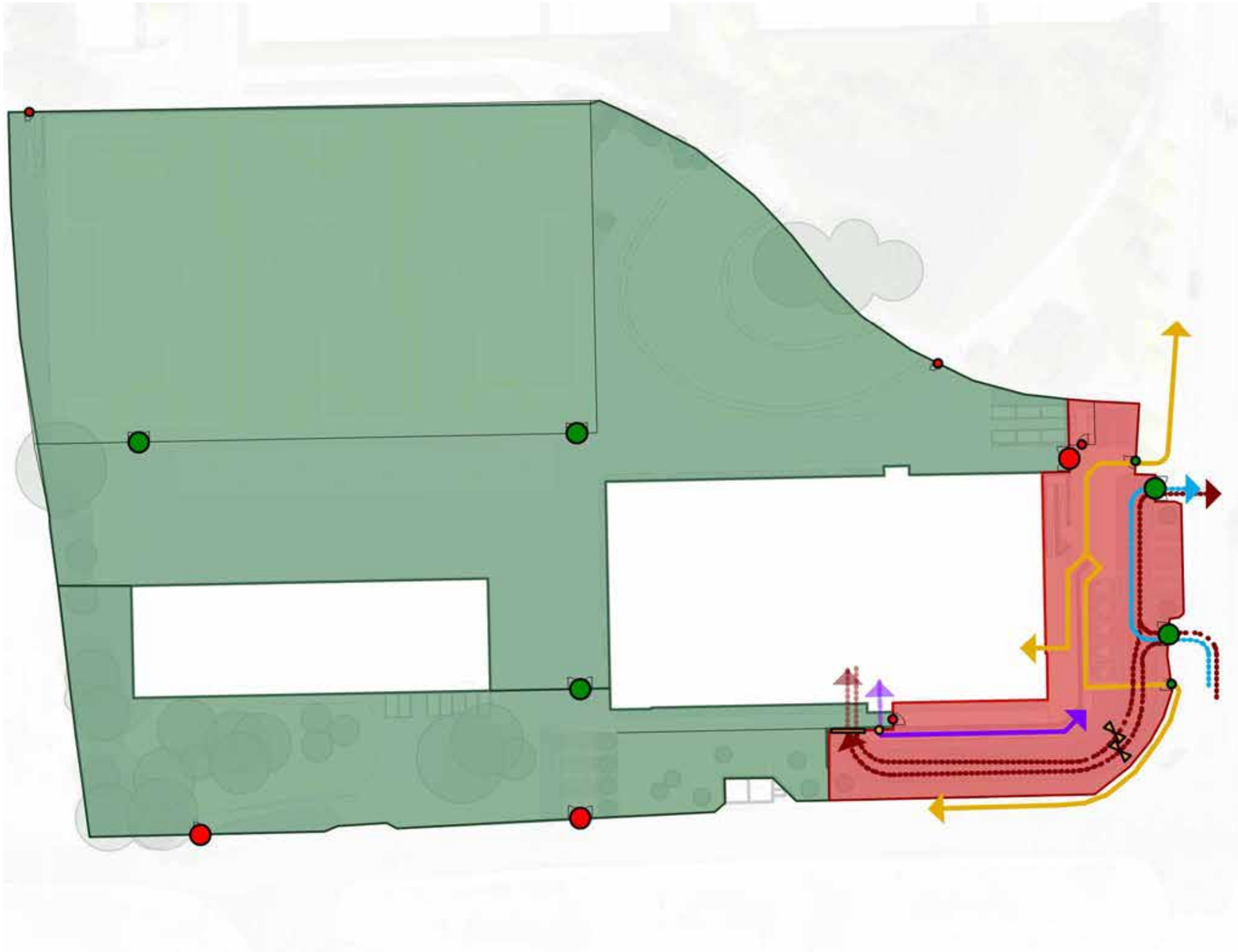
6 ACCESS

During the School Day

During the school day, all of the pedestrian entrances, apart from the main entrance, will be locked. Vehicles are able to use the visitor car park but pedestrian access within the school secure line can only be obtained through reception. Visitors may be able to use the underground basement car park, if the visitor car park is full. Access would be granted via the intercom. Visitors who park in the basement will have to walk up the visitors entrance to sign in to be let in to the main school beyond the secure line.

Servicing, deliveries and refuse collection can make use of the drop off bay adjacent the main entrance for pull ins/ delivery.

In the case of an emergency, ambulance access to the playground can be obtained via the ramp between the bin store and the building.



Proposed Access and Circulation During School Hours - Ares Landscape

6 ACCESS

Out of Hours Access

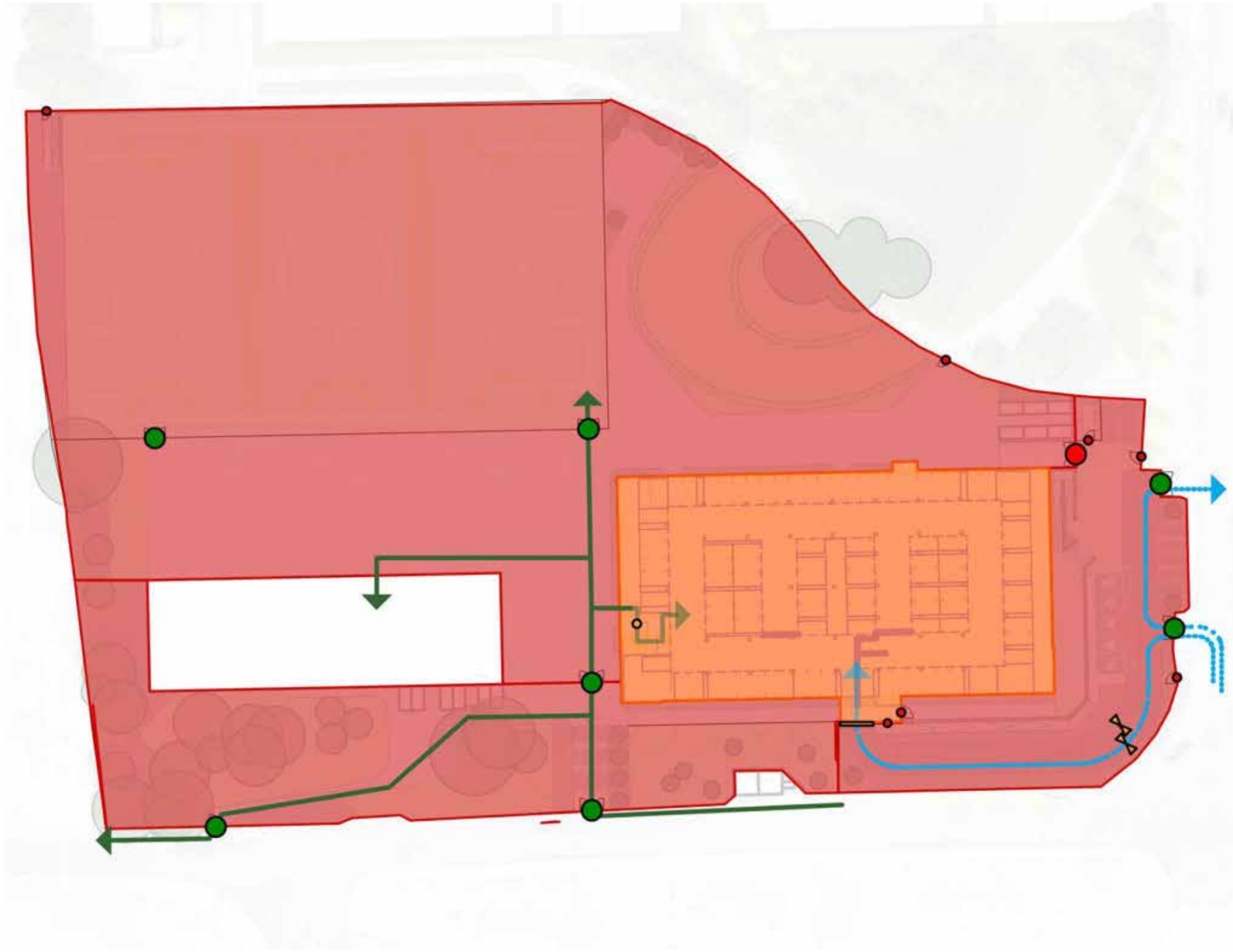
During out of hours, entry to the basement car park would be permitted via the intercom which will have a control in the sports building and a control in the main office depending on what function of the building was being used. Access to the sports block from the basement car park will be via doors and the lift. The doors will allow people to access the stairs up to ground level, with locked doors preventing access to the rest of the main school. The lift will be programmed to allow access to the ground floor and the MUGA only during out of hours.

6.3 Accessible and Inclusive Environments

Access & Parking

Due to the level differences between the existing roads and pavements, and the building, access for pedestrians is achieved by sets of steps and Part M complaint ramps. Access to the basement car park for pedestrians is via a Part M compliant ramp.

Once at ground floor level, access to the whole site is level.



Out of Hours Access Diagram - Ares Landscape

6 ACCESS

Proposed Main Entrance

Proposed Pupil Entrance into Dining Space

Pupil entrance on west elevation

Approach

The routes into each building are clear and will be signed, lit and demarcated appropriately via landscape treatments.

The design as proposed is fully Part M compliant. Accessible toilets will be located within the maximum travel distances recommended by the Building Regulations. Further details on accessibility will be developed during the next phase of the design with input from an Approved Inspector.

Entrances

All building entrances are clearly defined and marked on the external elevation. Powered entrance doors will be provided to the main entrance. The main entrance area will be staffed by a receptionist. Induction loops will be provided.

Staircases

Staircases in the proposed buildings are wide and designed to ambulant standards with handrails of appropriate type and position, closed risers and contrasting nosings.

Lifts

The proposed lift will be accessible to all students, staff and visitors who need to use it, for whatever reason. Access to the lift will be by way of key operated, biometric or swipe card controlled access. The lift will not be used for everyday circulation, but only for mobility impaired persons.

In the event of the lift being out-of-service, there are sufficient variety of spaces accessible on ground floor to enable the school to continue to deliver the curriculum to less mobile students by modifying room assignments on a short-term basis. There are also sufficient alternative accessible staff offices on ground floor to mitigate any issue

Learning Spaces

The learning spaces will be designed to accessible standards, be appropriately lit, incorporate height-adjustable furniture and have acoustic attenuation to meet or exceed BB93. Mobile induction loops will be provided for use in classrooms and shared activity spaces as required. Fixed induction loops are to be provided in the reception and main hall / assembly spaces.

Emergency Evacuation

The building is designed with appropriate emergency refuges within stair cores to allow for managed and assisted evacuation. All refuge areas will feature an alert and intercom link. The school will develop a Personal Emergency Evacuation Plan (PEEP) for any student or member of staff with mobility, sensory and/or cognitive impairments, and the procedures should be practised during fire drills.

7

7 ENVIRONMENTAL DESIGN

7 ENVIRONMENTAL DESIGN

7.1 Energy Efficient Design Approach

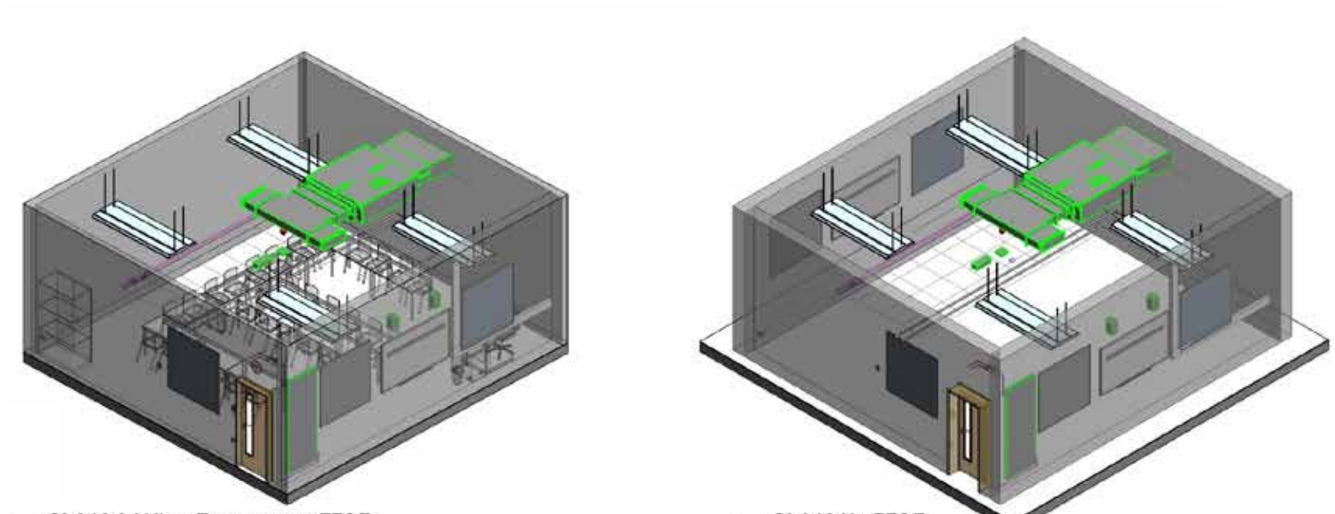
For further details please refer to the Energy Statement produced by Couch Perry Wilkes that forms part of this Planning Application.
The project has been designed in line with the current London Plan Energy Hierarchy with a focus on a fabric-first energy approach.

- LED lighting reducing lighting energy consumption by 35 - 40%
- Hybrid ventilation with heat recovery removes heat from extract air to warm incoming air ensuring fresh air without cold draughts even in winter
- Overcome acoustic site constraints from traffic on Brunswick Park Road in most energy efficient way
- Reduced hot water demand by 40% by water efficient fittings
- Fabric - First strategy - Significant betterment of Part L insulation & airtightness avoids the need for renewable energy technologies.
- Exposed thermal mass & night time purge provides free cooling during warmer months
- Typically can achieve 28% betterment over DfE Energy Consumption Targets for similar sized scheme

7.2 Incoming Services and Utilities

A new buried PE gas supply shall be taken from the local gas utility infrastructure to supply the proposed school. The new supply will go into a gas meter located at the site boundary to provide access to the meter. It is proposed that the supply will enter the main building via the ground floor incoming services plant space and serve the main boiler plant, the kitchen, the laboratories and appropriate technology spaces. Gas routes within the building shall be ventilated where gas main runs in a void. Incoming gas main entering plant room shall be provided with an emergency knock off button, which will cut off supply to all gas fired plant on activation.

A new potable water utility connection shall be provided for the building from the existing infrastructure. The incoming supply is to enter the building via the ground floor incoming services room and a new primary meter shall be installed just within the boundary to the site. A potable cold water storage tank shall be provided in the ground floor tank room. If required, an associated booster set shall be provided to ensure sufficient water pressure.



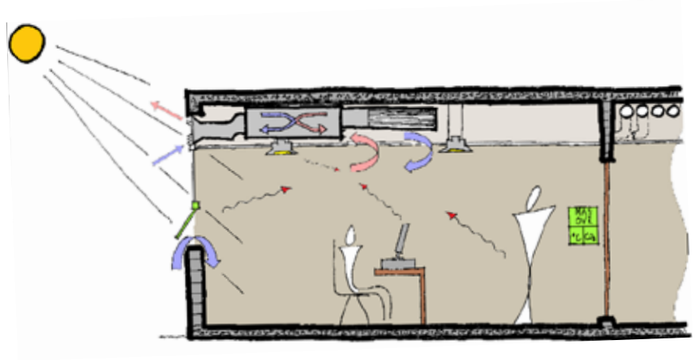
Typical Classroom Servicing Arrangement

Typical Classroom View

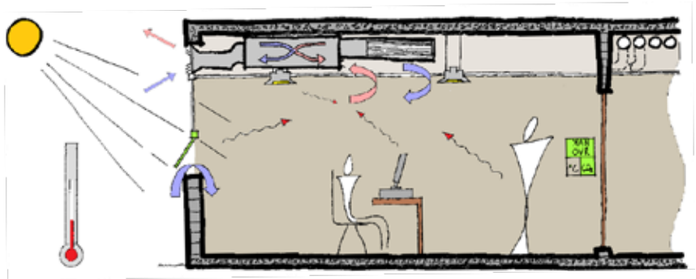
7 ENVIRONMENTAL DESIGN

Extract from Proposed Incoming Services and Utilities Plan

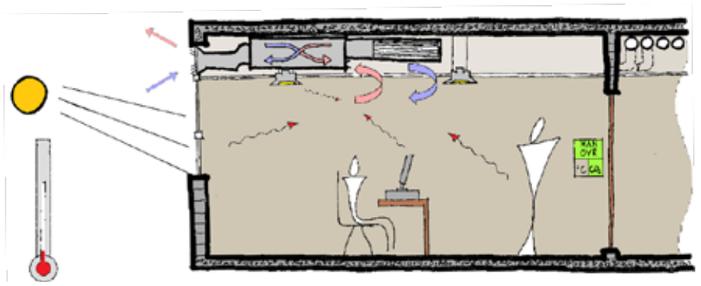
7 ENVIRONMENTAL DESIGN



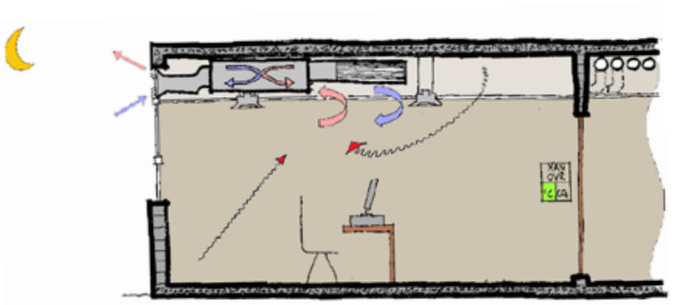
Summer



Mid Season



Winter



Secure Night time Purge

7 ENVIRONMENTAL DESIGN

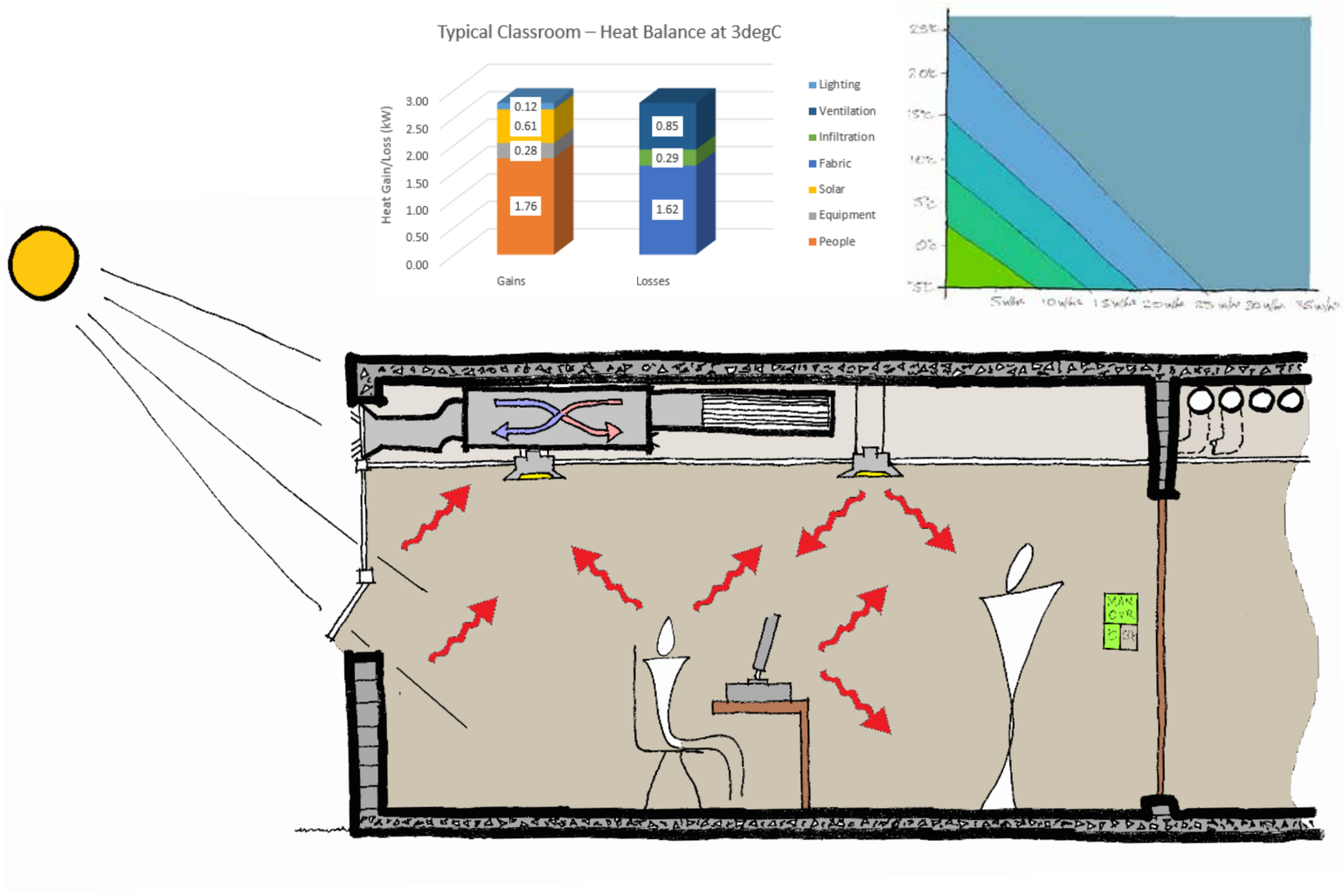
7.3 Building Servicing Strategy

Heating Strategy

New LTHW (Low Temperature Hot Water) plant shall be provided to service the new building, via new efficient gas condensing boiler plant.
The LPHW (Low Pressure Hot Water) heating system shall comprise control facilities for optimum start and weather compensation. Pump sets shall be variable speed type and complete with integral speed controllers and pressure transducers located at suitable locations within the index leg. Pump-sets shall be twin-head type. Self-regulating differential pressure control valves shall be provided on all sub-circuits to avoid disparities in hydraulic pressure from the variable speed circuits. A packaged pressurisation unit shall be provided along with a combined dirt/air separator and other ancillary equipment necessary to make the system operates correctly.
Radiators, LST (Low Surface Temperature) radiators and radiant panel installations shall comprise of heating circuits (zones) with separate weather compensation to radiator circuits and timed facilities to promote flexibility in out of hours use and operational energy efficiency. Final number of zones shall be dictated by the requirements of good thermal and comfort control of the LPHW system.
The heating system shall be designed for intermittent operation and shall be capable of maintaining the minimum internal design temperatures listed in the area data sheets for the project.

Domestics Strategy

Domestic hot water shall be generated centrally via LPHW un-vented calorifiers fed from the CT circuit and distributed to hot water outlets complete with all necessary control and safety devices, drain cocks and de-stratification pumps. Hot water will be generated at 60°C and re-circulated to ensure a minimum return temperature of 55°C for legionella purposes.
Domestic hot water for all sanitary ware items shall be distributed using a flow and return system to ensure hot water is readily available and to also satisfy guidelines regarding the risk of legionella growth. The temperature of hot water supplies to sanitary ware (with the exception of cleaner's sinks, etc.) shall not exceed 43°C whereby TMV3 valves shall be provided throughout.
Hot and Cold water storage shall be reduced as much as possible to reduce maintenance. Potable cold water storage and associated booster set shall be located within the ground floor tank room and shall be a sectioned GRP tank split into two sections with dedicated service and bypass valve arrangement to enable safe maintenance on either section.



Typical Classroom Heating Balance

7 ENVIRONMENTAL DESIGN

7.4 External Lighting Strategy

All external lighting is to be controlled by a photocell, timeclock arrangement with manual override switch. The external time clock is to be set so all external lighting is off between 2300 & 0700Hrs.

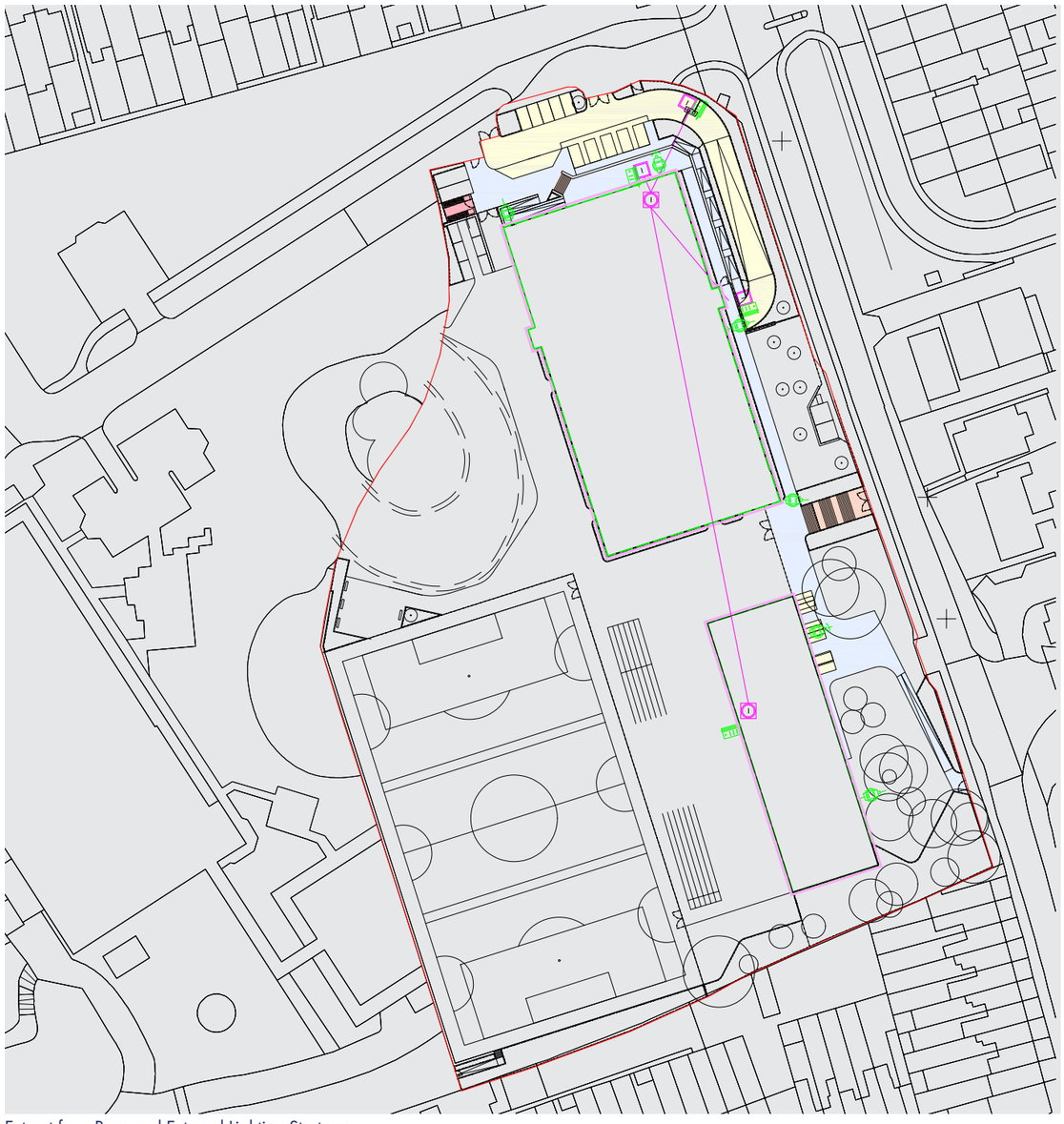
All lighting columns to be sited to suit location away from trees landscape and external furniture. The normal pedestrian escape routes shall be provided with emergency lighting to the same standard as escape routes within nonresidential public premises in accordance with BS 5266-1.

Ducts shall be provided to serve MUGA pitch lighting the ducts shall be routed back to external lighting and power distribution boards.

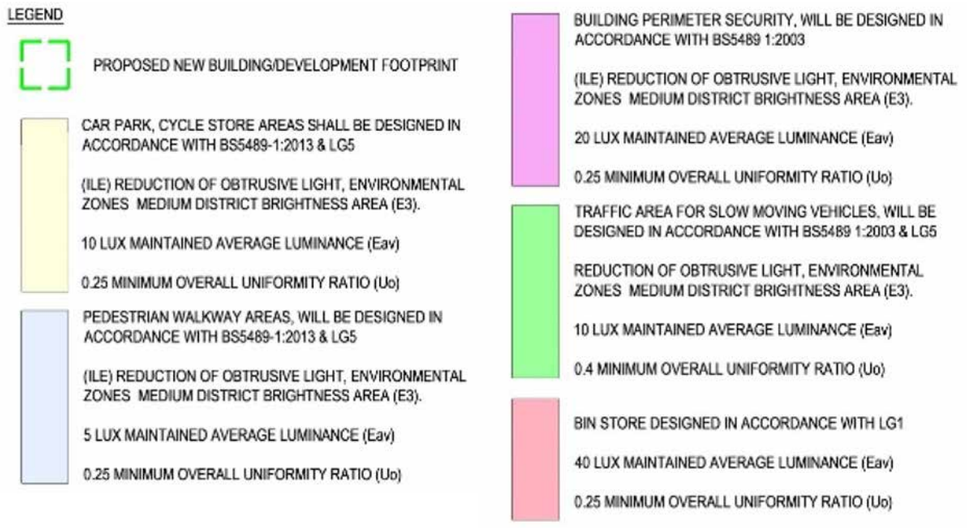
Lighting Standards

The external lighting design will be designed in line with the following design standards:

- ILP the institution of lighting engineers guidance notes for the reduction of obstructive light GN01:2011
- BS EN 1264-2 Lighting of work places - Outdoor workplaces Part 2



Extract from Proposed External Lighting Strategy



8 CONCLUSION

Aerial view of the site in context

08 CONCLUSION

8.1 Conclusion

The proposals are for the construction of a new build Teaching Block and Sports Block to form a new secondary school, to accommodate up to 1050 pupils. The new buildings will provide a much-needed purpose-built facility for the existing St Andrew the Apostle students and staff, after a long wait in temporary accommodation.

The design has been developed in close consultation with the Trust, DfE and wider consultant team to create a well thought out, attractive and functional school. The building's internal accommodation provides optimum teaching and learning environments, which are energy efficient and flexible, as well as meeting the DfE's strict requirements for daylighting, ventilation, acoustics and thermal comfort.

The constrained site presented a challenge, however, the team have developed the site masterplan to include external spaces that flow, are flexible and maximises the usable space for the benefit of the students.

The proposals include facilities that are would be available for community use, making the school and its sports facilities a valuable local community asset.

Exterior View of the School from the key Northeast corner

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FILE	**FS0200-STL-XX-XX-RP-A-RP001**
PROJECT	**St Andrew the Apostle Secondary School**
CLIENT	**Bowmer & Kirkland**
STRIDE TREGLOWN JOB No.	**154192**
PREPARED BY	**RB**
CHECKED BY	**SH**
DATE	**03.08.2021**
REVISION No.	**PL06**

	REVISION
1	**PL01 - Draft Issue for Review**
2	**PL02 - Planning Issue**
3	**PL03 - Planning Issue**
4	**PL04 - Planning Issue**
5	**PL05 - Updates for BREEAM**
6	**PL06 - Planning Issue**