

Kier Construction / Liverpool City Council Client: Job: 159\_St Silas CE Primary School Document: 159\_Design & Access Statement







# **Document Information**

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159\_Design and Access Statement Rev A (17/08/2015)



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# Statement of Proposal

This Design and Access statement proposes to enlarge St Silas Church of England Primary School from a single form entry to a 1.5 form entry. It demonstrates why it is necessary to do this and how the design team have responded to this need in a way that is sensitive to both the operational needs of the schools governance and the aesthetic needs of the schools neighbours in the surrounding community.









# 1.0 Appraising the Context

### 1.0.1 Physical, Social & Economic Characteristics

St Silas CE Primary School is situated on Pengwern Street in the area known as the Welsh streets in Princes Park ward to the west of Liverpool and 2 miles south of the city centre. The wards population is young and diverse, with over half coming from BME groups. Deprivation, worklessness, child poverty, crime and poor health are all major issues in the ward.

The area is diverse in character developed in the late 18th / early 19th century and takes its name from the Grade 2 listed public park less than 5 minute walk from the school which is surrounded by grand Georgian villas.

By contrast the Welsh Streets in which the school was sited are a series of compact Victorian terraces, interspersed with modern 20th century civic buildings. With the exception of Admiral Street Police Station and St Philemons C of E Church are (typical of the types of early modern civic development in the area) and a minor amount of slum clearance in the 60s, the area has undergone relatively little change since its early beginnings.

Since 2003 two wards populations have increased by 27%. The proportion of households that are families is low, however a sixth of households are lone parent homes. Princes Park is a young ward and has a high proportion of young children (18%) and working age adults (73%). The ward has a significantly high level of overall deprivation with 94% of the wards falling into the most deprived 5% nationally and 60% fall into the most deprived 1%. This equates to over 2,000 children living in child poverty which is 3x the national average.

Adult unemployment is twice the national average with 28% of people in Prince Park of a working age economically inactive.

The mortality rate in is poor, education attainment is below the national standard and crime levels are above average when compared with the rest of the city.

In terms of housing, in Princes Park has a large social housing sector (55%), reflecting the level of deprivation in the area

However it should be noted that although deprivation levels remain high, since 2007 the ward has seen some improvements in this area.

In terms of the BME population, the school has identified that it needs to evolve into a 1.5 form entry school, to allow for an element of vertical streaming. By doing this they can accommodate the needs of the significant number of vulnerable children shuttling to and from their families country of origin. This can lead to long periods when the children are out of formal education. Vertical streaming alongside personalised programmes will address any educational shortfalls that may arise from this way of living.

This paints a portrait of a rising population that has limited access to wealth and resource that enables them to seek out opportunities to improve their situation outside of their immediate local environment. There is therefore a compelling need to increase the school's annual Pupil Admission Number (PAN) in order to meet the local population increase (particularly that of Princes Park ward with a child population of 18%) and provide a genuine benefit to local families that have limited access to a means of transport.

1. General Location 2. Photo of School



St Silas CE Primary in City Context

# City Council



St Silas CE Primary School Axonometric & Site Boundary

Image taken from google.com

### 1.0.2 St Silas Church of England Primary School

There has been a school on the site of St Silas since 1869. At this time the site was bisected by St Silas Street (a continuation of Dovey Street), with a school and church on one side (north) and a drill house and a collection of terraced houses on the other (south). The original school, drill hall and church were demolished in 1970 to make way for a new modern replacement school. It is noted that the building line of the current school follows that of the original St Silas Street which was retained well into the 1990s, before the terraces and street were converted into hard play area.

With the exception of a row of terraces along Admiral Street, the site is rectangular with separate buildings for the infant and junior years. Typical of an inner city school, there are no soft play spaces.

The infant school is a single storey L-shaped flat roof structure initially built as two separate buildings in built in 1970. The hall was added in the late 1970s when the junior school was built. On the face of it, the internal layout is well planned with the main access and communal areas centred on its axis. It uses the assembly hall as a means of circulation. We suggest that the later addition of the hall was part of an overall phasing strategy as the original school house was still in operation at this stage. There is no kitchen in the infant school as the school centralises dining within the junior school. Externally the schools development is constrained on its north-west and north eastern sides by the site boundary and to some extent of the south eastern side by the proximity of the junior school, somewhat limiting the potential to expand the building through new build elements. However when testing the building against BB103, we have noted that the overall gross and net floor areas are





extensive when compared against the new standard. With the exception of the non-existent kitchen, all spaces are extensive, in particular the classrooms which are twice the required size.

Built after 1975, the junior school follows the building lines of the original school house. It has a T-shaped footprint. Basic teaching spaces are arranged in two storeys along the south-western end of the 'T' and an assembly hall located at the leg of the 'T'. The two areas are connected by a single storey axis. The building is constrained along its north-east and south-eastern sides by the site boundary and to a lesser extent along its north-western edge by the adjacent infant school. Under BB103, we have noted that the overall gross and net floor areas are standard when compared to the new benchmark, with the exception of the kitchen which is considered too small for the junior school alone. Therefore it may be under considerable strain when pupil intake is increased in both the infant and junior school. Staff spaces will also be strained and storage is not ideal.

Since the 90s the school has been utilising a collection of mobile classrooms to assist them in delivering their individualised teaching programmes for the BME residents of Princes Park. These classrooms are way past what should be considered their operational life expectancy and we have proposed that these will be replaced with a more permanent structure.







### 1.0.3 Basic Needs & Capital Works

In 2012 the statistics released by the Department for Education stated that the number of children in England's state primary and nursery schools is set to rise by 18% by 2020. Overall numbers will reach approximately 4.85 million compared with 4.11 million in 2012. Numbers were predicted to increase 8% between 2012 and 2015 alone. The population rise in Riverside ward appears to be consistent with this statistic.

K2 Architects were initially appointed by Liverpool City Council to assess how St Silas might be adapted to address the rising pupil admission numbers (PAN) with a view to increasing its pupil intake capacity to 1.5 forms, thereby enabling it to meet the demands of an increasing local population.

Schools such as St Silas were built to meets the needs of the education establishment in the 1970s when pupil admission numbers were at their peak. However birth rates in the UK dropped in the 1990s, leading to a fall in the number of children in state primary schools in 2000. The lowest national number was reached in 2009, at 3.95 million. This has resulted in many schools having a surplus supply of accommodation that has been adapted into a number of learning resource opportunities. Particularly popular adaptations have been ICT, music rooms and libraries.

St Silas is no exception to this rule, however birth rates began to increase again in 2002, putting particular strain on its existing PAN. K2 Architects review of the school demonstrates that St Cleopas could be adapted in line with EFA guidelines if the pupil admission numbers were increased to a 1.5 form entry school.

### 1.0.4 Consultation

In order to develop a design brief that is consistent with the schools aspirations and those of other key stakeholders to the project the design team have carried out a series of consultation exercises. These exercises targeting the following stakeholders:

### The Local Authority Asset Management team and representatives

- The Diocese Asset Management Team
- The school's teaching, pastoral and administration staff
- The Schools Board of Governors
- The local community through drop in days
- Local Authority planning officers
- Local Authority Building Control Officers

Stakeholder involvement and consultation was critical to the ultimate success of the project as it helped us to: Find out how people currently use the school and its surroundings

- Identify current areas of concern
- Learn what ideas people might have about improving the current building
- Generate meaningful discussions •
- Create information that will release and/or generate future • funding
- Demonstrate community support for the proposed works
- Identify risks to be managed •
- Help to locate funding sources or possible joint projects or initiatives that might be of benefit to the school.



St Silas CE Primary Year 3 Students

Image taken from stsilasblog.net



# The Proposed Building

### 1.0.5 Consulting with the Local Authority

Local planning and building control officers have been consulted about the proposals on separate occasions in order to obtain pre-application advice.

23.07.15 – The design team held a meeting to discuss the proposals with Planning Officers

13.08.15 – The design team held a meeting to discuss the proposals with Building Control Officers





# 1.0.7 Consulting with School

The object of the stakeholder consultation exercise is to enable the design team to gain an insight into the working practices of the school. In particular;

- To establish how the school currently carries out its operations
- Determine the strengths and weaknesses of the current accommodation provision in terms of its fitness for purpose
- Determine what needs to be done to improve the accommodation provision, for the schools operational activities to flourish.

The design team carried out numerous consultations with the schools head teacher and his management team. They were and still are considered part of the overall design team, giving us the opportunity to consult with them as part of an ongoing process through the entire project which was captured in the minutes of the design team meetings. Where necessary the members of the nursery staff and the caretaker were engaged to help with the finer operational details.







2.0 Design Response

# 2.0 Design Response

### 2.0.1 Existing Gross & Net Floor Areas

Existing number of years: 7

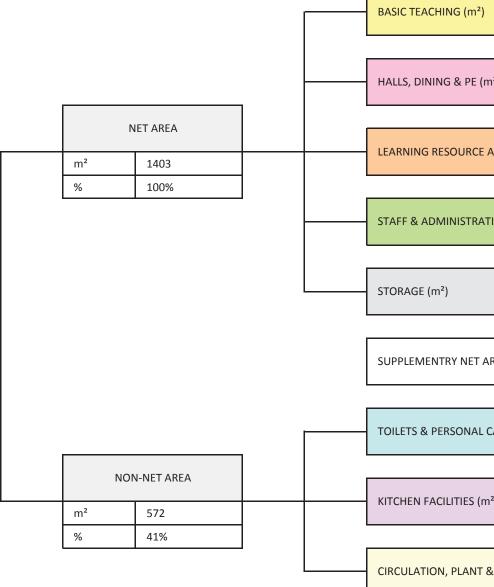
Existing number of forms: 1

Existing PAN: 30

Existing pupil capacity: 210

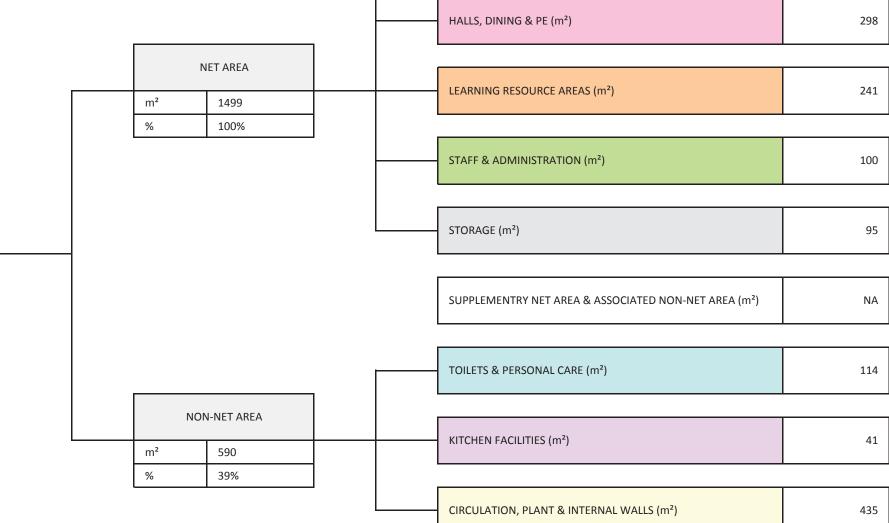
In comparing the existing school layout with a notional school for 210 students designed in accordance with BB103, we have noted that all area provisions for the school are excessive for a single form entry school with the exception of the kitchen which is significantly undersized for a modern school. It appears however that the school has originally been design for class sizes of around 24 students rather than the usual 30. It will not be therefore a straightforward exercise in reclaiming old resource spaces for classrooms. In addition to this the school operates a vertical streaming policy that is not necessarily a good fit for BB103. There will therefore be challenges in providing a suitable approach to the design of the expanded school.

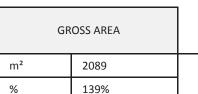
GR	OSS AREA	
m²	1975	
%	141%	



)	652
'm²)	249
E AREAS (m²)	307
ATION (m²)	105
	90
AREA & ASSOCIATED NON-NET AREA (m <sup>2</sup> )	NA
. CARE (m²)	110
m²)	36
& INTERNAL WALLS (m²)	426

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BASIC TEACHING (m<sup>2</sup>)

2.0 Design Response





# 2.0.2 Proposed Gross and Net Floor Area

Existing number of years: 7

Existing number of forms: 1.5

Existing PAN: 45

765

Existing pupil capacity: 315

The existing school carries out a significant amount of its operation within temporary classrooms that are well past their operational lifespan. We have therefore proposed that we demolish these temporary classrooms and replace them with a more permanent purpose built structure. We also propose to enlarge the kitchen spaces. In all areas our proposals meet or surpass the minimum standards of BB103. The proposals have a net:non-net floor area of 139% which is slightly more efficient than the existing of 141%







# 3.0 External Layout

### 3.0.1 Proposed Site Plan

### Relationship of building to site

The site is rectilinear in shape and covers the centre of a block of terrace houses.

The site contains three buildings. The infant and junior blocks are situated in the Northern half of the site with frontages onto High Park Street and Pengwern Street. A temporary modular building is located towards the Southern corner of the site, facing Pengwern Street.

The infant and temporary buildings are single storey. The junior block contains part single storey and part two storey elements with a double height sports hall.

Due to the changes in level across the site, a number of steps and ramps have been added to allow level access into the temporary building which has had a dramatic impact on the street scene of Pengwern Street.

The site area equates to 5697m2 which limits the space, both internally and externally, due to this, the proposals make use of under used and redundant spaces.

The proposed extension to the existing sports hall of the Junior Block makes use of an existing step in the building line adjacent to the kitchen, rationalising the building line along Pengwern Street.

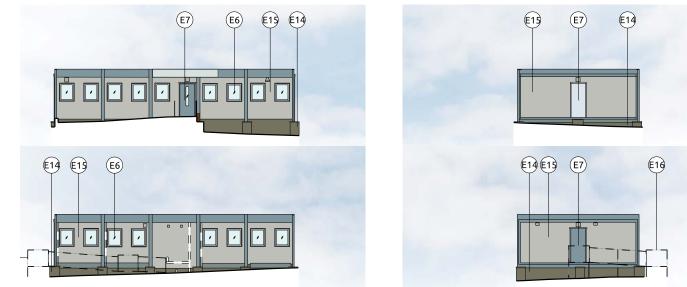
The existing temporary building facing Pengern Street will be removed along with the associated steps and ramped access and replaced with a permanent building. This has been designed to accommodate two dedicated classroom spaces, sited at a

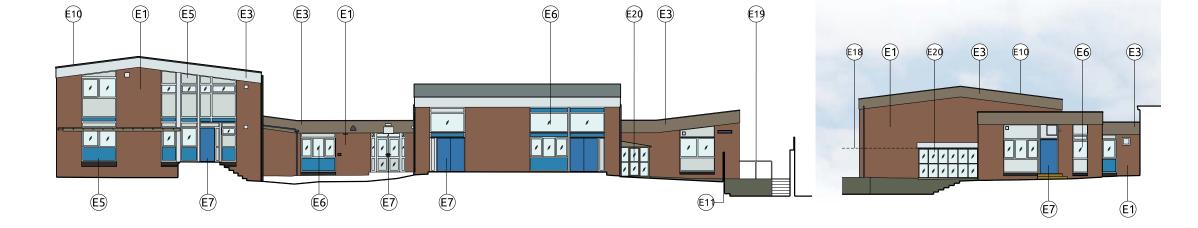
level that mitigates the requirement for ramped access. Level access will be provided from the playground side of the building through the construction of a new retaining wall.

Both extensions will be single storey in scale and will therefore maintain a low level of visual impact on the street scene.

**PENGWERN STREET** 













# 4.0 Scale

# 4.0.1 Existing Site Elevations

The footprint of the existing junior block is approximately 80m x 60m with a part 10m high two storey element and part 4m high single storey element.

The temporary building is approximately 15m x 7 x 3.5m high and is sat on a blockwork plinth that varies in height to address the level changes that occur across the site in this area.





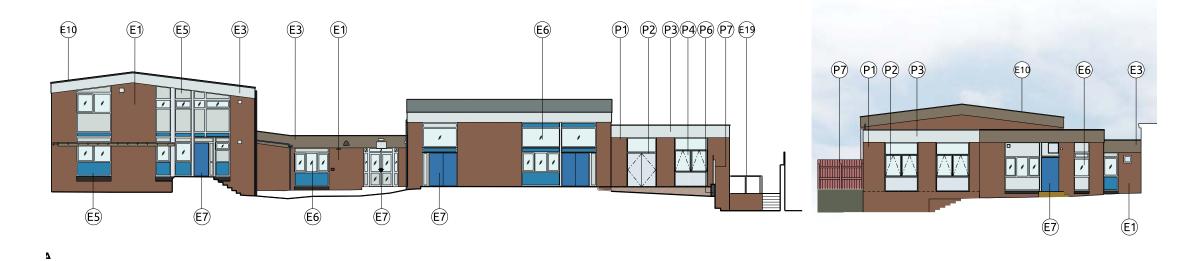


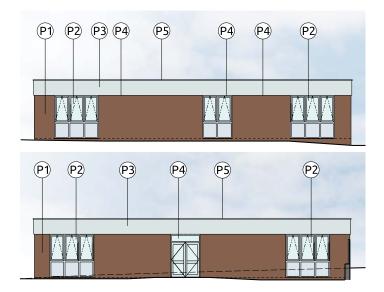
### 4.0.2 Proposed Site Elevations

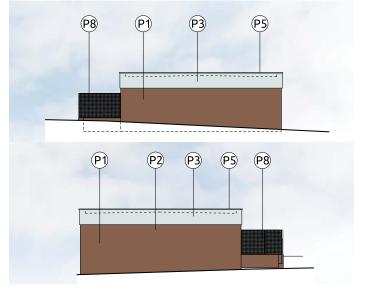
The extension to the junior block will be approximately 7m x 7m x 4m high. This scale ensures that the proposed extension will be in keeping with the height of the adjacent kitchen area that the extension is positioned against while also appearing as a subservient block to the sports hall. The elevational treatment takes its influence from the existing junior block building.

The proposed two classroom block is approximately 19.5m x 10m x 3.6m high, a size that has been determined by the number of pupils that will be taught in the two classroom.

The elevational treatment references the neighbouring junior block and due to its traditional masonry construction creates a positive impact on the street scene when compared to the temporary modular building type and its associated external ramp and step access.











RIBA Stage 3: Developed Design

Ground Floor 1:200@A3

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# 5.0 Internal Layout

5.0.1 Junior Block Existing Ground Floor

The existing Junior Block building is a part single and part two storey, with a double height sports hall. The existing building caters for a 1 form entry.



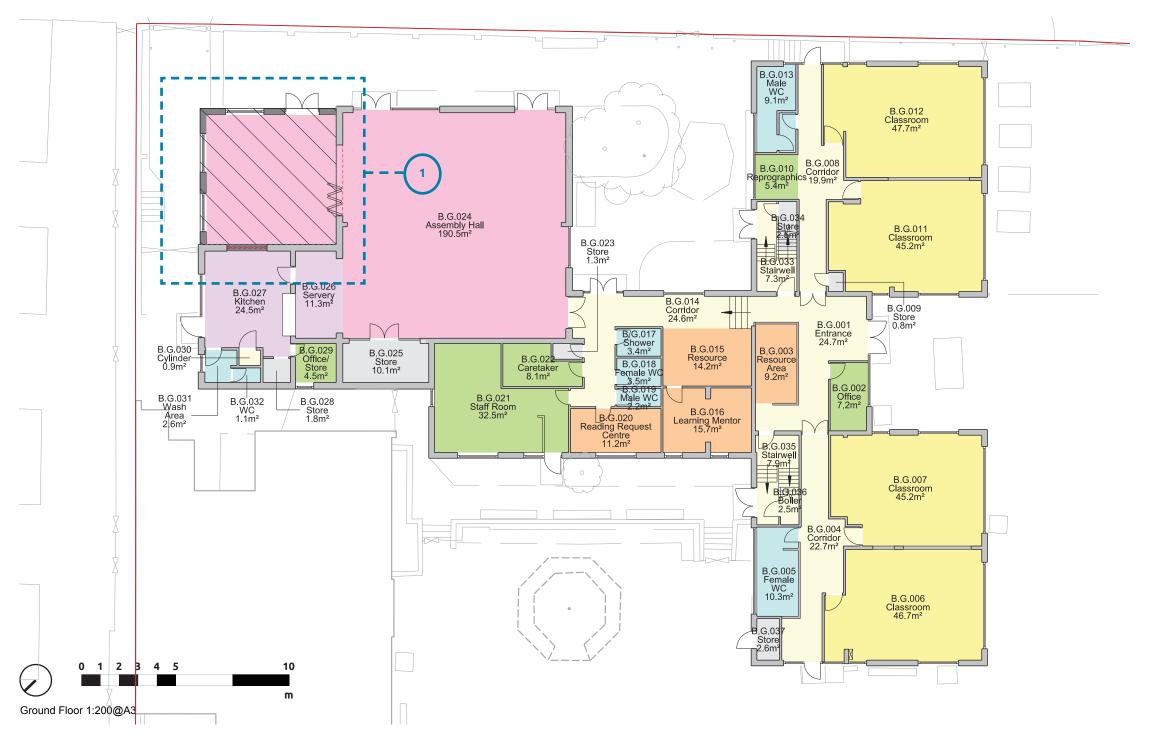








1. New build single storey extension to the existing sports hall which will provide greater space when the hall is in use for dining.











# 5.0.3 Temporary Building Existing Ground Floor

The existing structure is single storey and contains a small teaching space, intervention space, office, kitchen and toilets.

# 5.0.4 Proposed New Build Ground Floor

1. New build single storey extension incorporating 2 new classrooms, a learning resource area, staff kitchen and toilets..











6.0 Landscape

# 6.0 Landscape

# 6.0.1 Existing Landscape

1. Due to the limited size of the site, landscaped areas are extremely limited. The main area of external works affected by the proposals are the ramps which provide access to the temporary building which also have a large contribution to the street scene.

Site Plan Key

----- Site Boundary

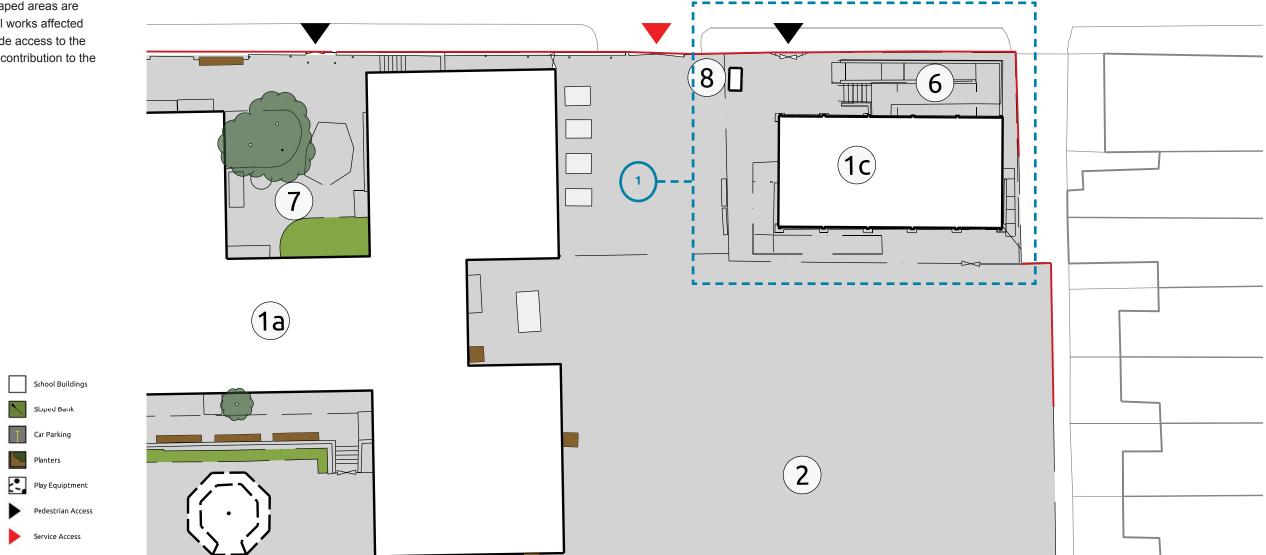
Soft Play Space

Hard Play Space

Habitat Area — — Fence Line

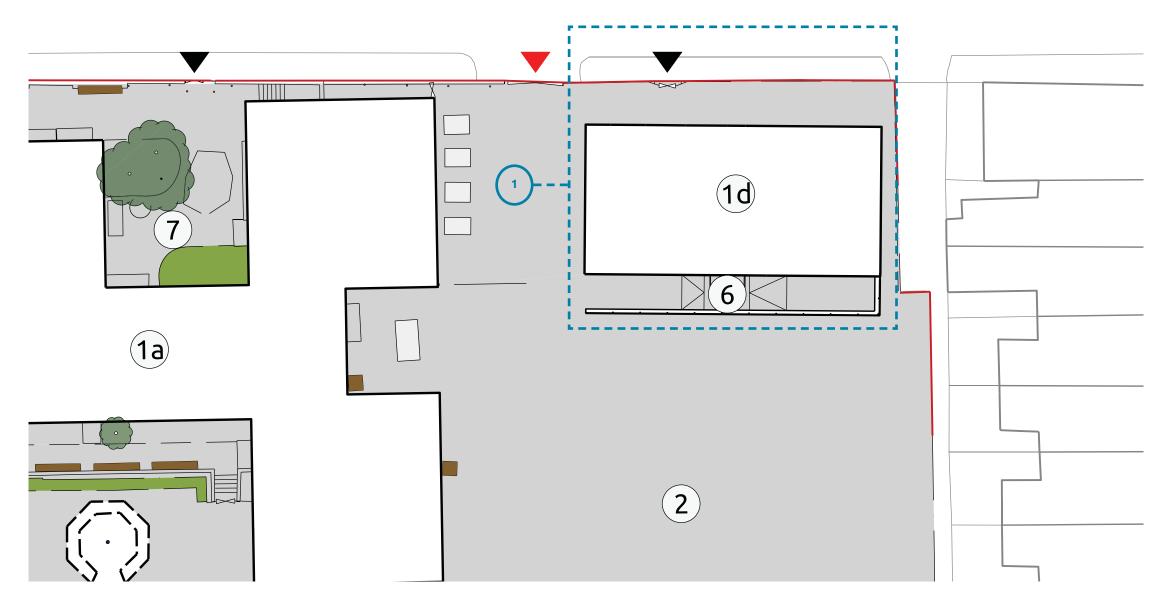
Vehicle Entrance

Trees





6.0 Landscape





# 6.0.2 Proposed Landscape

1. Opportunities to implement areas of landscaping are limited however, the proposals for the new build block do allow for the removal of the stepped and ramped access that fronts Pengwern Street, improving the street scene.









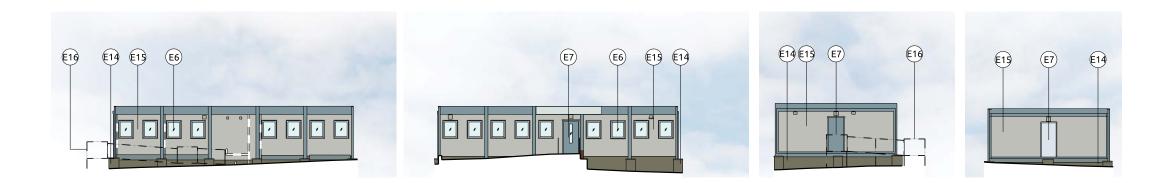
# 7.0 Appearance

# 7.0.1 Existing Elevations

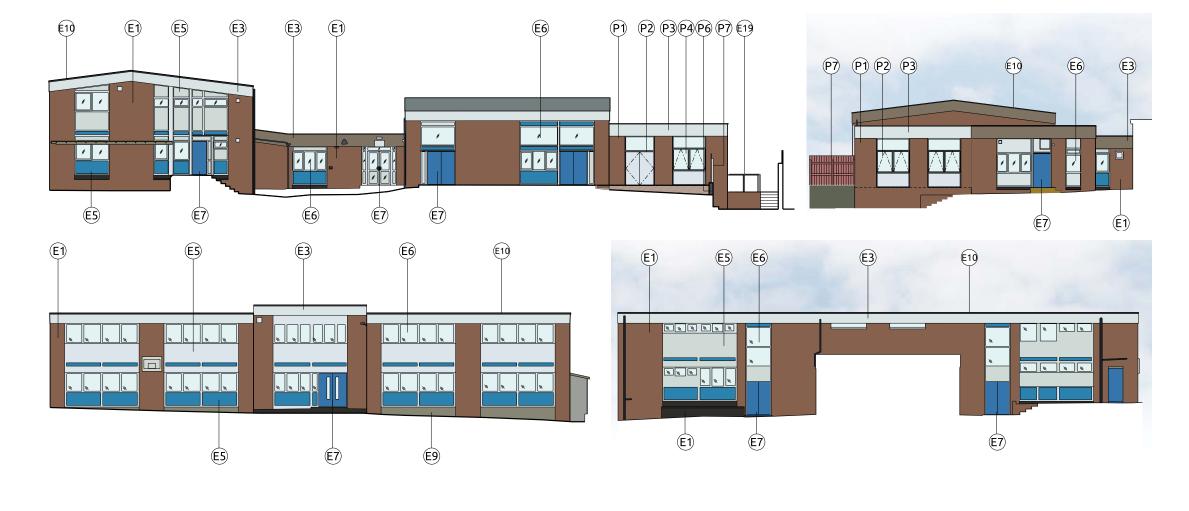
The appearance of the existing junior block is made up of facing brickwork with a fascia cladding panel at high level. This is broken up by window and door modules containing PVC blanking panels, installed to the full height of the elevation, the proposed extension replicates this elevational treatment.

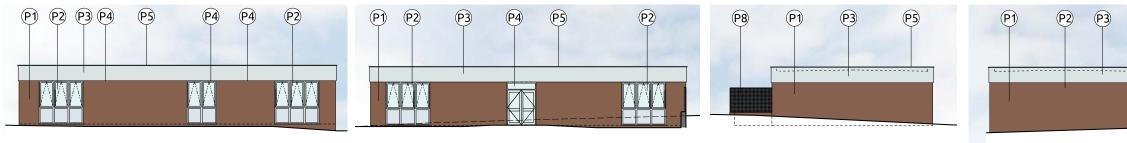
The existing temporary building is made up of metal cladding with square windows installed at regular intervals due to the modular nature of the building. Due to the level changes across the site, this modular building has been placed on a blockwork plinth.











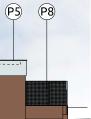


# 7.0.4 Proposed Elevations

The proposed extension to the Junior school building references the materials of the adjacent Junior block and will be finished with facing brickwork and high level fascia cladding panels complete with full height UPVC window and door modules containing UPVC blanking panels.

As mentioned previously, the new build classroom block will replicate the palette of materials used on the existing school buildings thorugh the use of facing brickwork, high level fascia cladding panels complete with full height UPVC window and door modules containing UPVC blanking panels.

This will give the site a more unified appearance as a whole while providing a positive impact on the street scene.











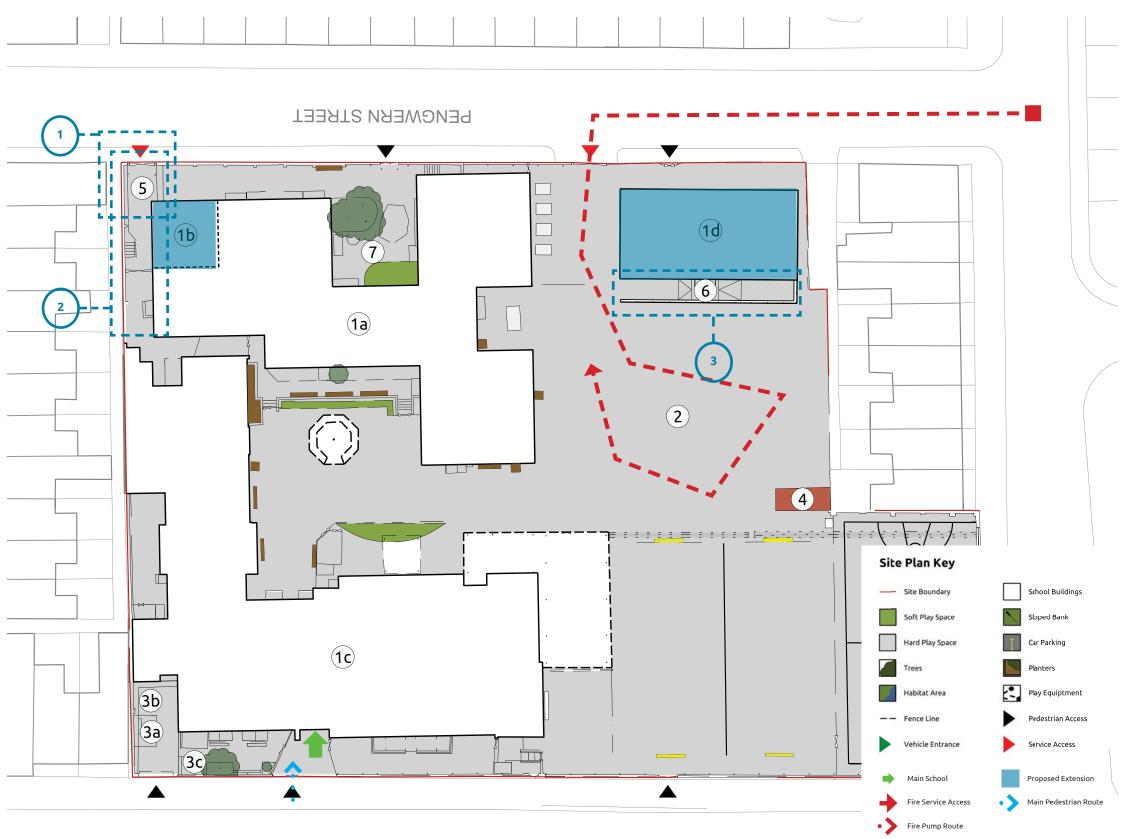
# 8.0 Access

### 8.0.1 Disabled & Emergency Access

Access into the existing Infants and Junior school will remain unchanged by the proposals.

Level access into the Proposed Standalone Building will be achieved through the construction of a retaining wall forming a protective barrier between the playground and the approach to the building where a level difference of upto 800mm may be achieved. The approach to the building will have a maximum 1:21 gradient.

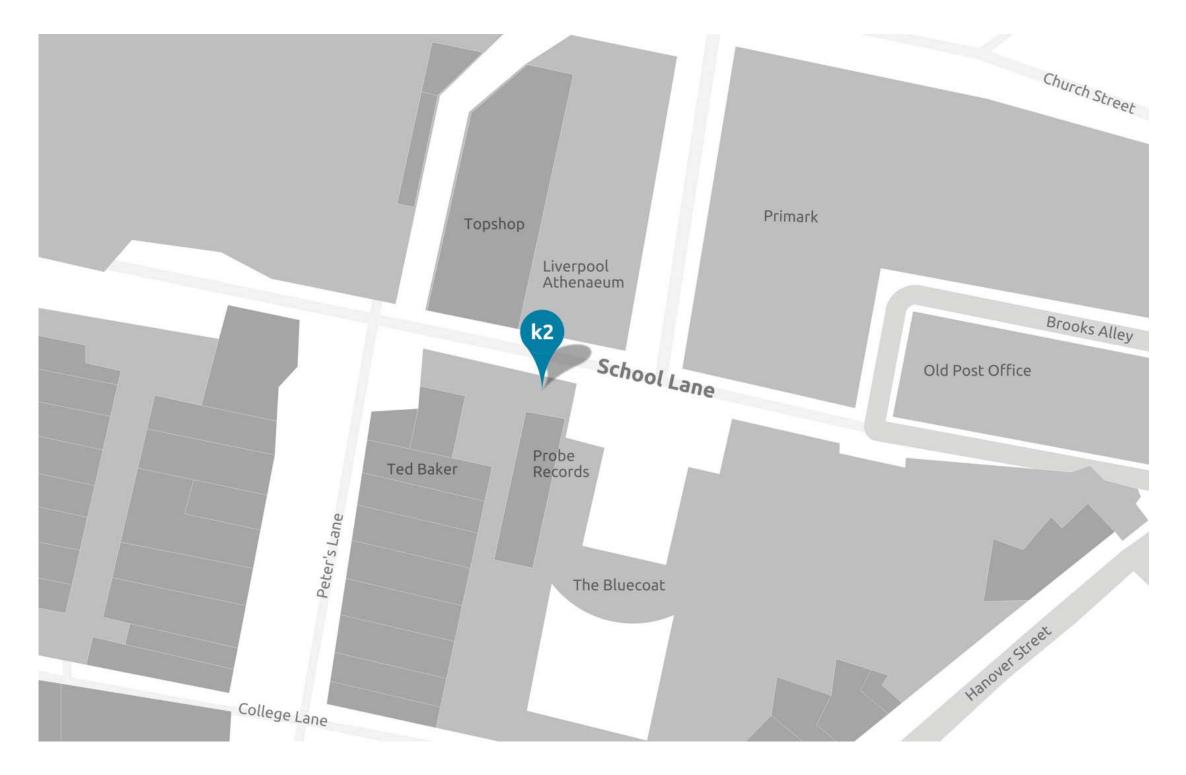
Further information on accessibility for emergency access vehicles, servicing, staff parking and access to public transport can be found in the Transport statement that accompanies this design and access statement.



HIGH PARK STREET

3. Proposed Level Access Ramp







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