

## 9.6 Access and Security

### 9.6.1 Accessibility

The site will be fully compliant with Approved Document Part M, ensuring full accessibility to all, with ramps, handrails, guard rails and tactile paving provided as required.

### 9.6.2 Vehicular Access

Vehicles will enter from the east into the existing access then turn right at the junction, with some mini buses accessing Pinn River turning right to the designated car park and other vehicles to Coteford continuing on the main access road around the island.

### 9.6.3 Pedestrian and cyclist access

Pedestrian will access via Fore Street and then to the main access road in to the school. Safe access routes have been created for staff and visitors to move around the car parks.

### 9.6.4 Services and refuse collection

The site will be accessed via the main access road to the school to service the building and for bin collection.

### 9.6.5 Fire tender access

Fire tenders will access the site via the main access road.



10.1 Drainage Strategy

Existing Sewerage

Public Sewerage

There are no public foul water sewers located on site. The nearest foul water sewer is located within the playing field for Coteford School, south of the proposed development site. The public Thames Water foul sewers are sized to DN675 and flows southeast. It has been recorded that the nearest public foul water sewer has a depth of approximately 10m.

There are no public surface water sewers located on site. The nearest surface water sewer is located within the playing field for Coteford School, south of the proposed development site. The public Thames Water surface water sewers are sized to DN225 and flow southwards. It has been recorded that the nearest public surface water manhole to the site has an approximate depth of 3.4m.

Private Sewerage

Several surface water sewers have been identified within the site boundary. The existing drainage is currently servicing the existing Grangewood School. All on site surface water sewers are sized to DN100, with exception given to the discharge surface water sewer which is sized to DN150. The surface water sewer proceeds to cross the Coteford School playing field and is then anticipated to connect into the public Thames Water sewer, although a CCTV survey is required to confirm the connection into the public

surface water sewer. It is proposed that all on site surface water drainage will be abandoned and tied back to the site boundary. A manhole is proposed to be installed on the identified DN150 discharge sewer. A CCTV survey is required to confirm that no upstream properties are served by the identified private drainage prior to sewer abandonment.

The existing foul drainage is currently servicing the existing Grangewood School. Within the site boundary, several DN100 foul sewers connect into an existing manhole are proposed to be removed. The foul sewer proceeds to cross the Coteford School playing field and is then anticipated to connect into the public Thames Water foul sewer, although a CCTV survey is required to confirm the connection into the public foul sewer. It is proposed that all on site foul drainage will be abandoned and tied back to the site boundary, or the existing manhole proposed for retainment. A CCTV survey is required to confirm that no upstream properties are served by the identified private drainage prior to sewer abandonment.

Drainage Strategy

A full Flood Risk Assessment and Drainage Strategy report has been proposed for the scheme; refer to document 080522-CUR-XX-XX-T-C-92000.

It is proposed that the drainage strategy for the site utilises separate surface water and foul water drainage systems. The proposed surface water network will utilise rainwater pipes, gullies, channels, and pipes to collect and convey storm water. A larger attenuation tank will be utilised prior to the

outfall from site to attenuate excess surface water during high intensity rainfall events. A permeable pavement utilised beneath the MUGA will also offer further storage whilst draining the MUGA pitch. Surface water discharge from site will be limited to 2.9l/s using a vortex flow control installed in the final proposed chamber.

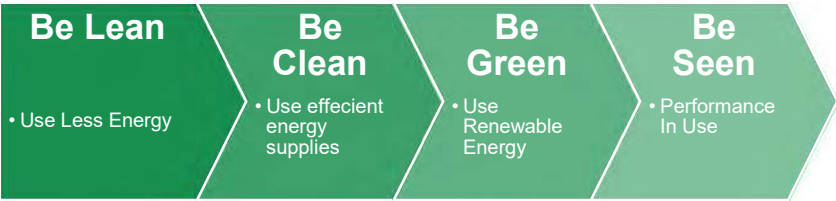
The proposed surface water network drains an area of 0.76ha. The design of the network was intended to ensure that the pre-development area draining unrestricted to the school network was either equal to or less than the post-development undrained area. Due to the existing site levels and fragmented increases of impermeable areas to the car park, the drainage strategy has proposed to re-design an area of existing hardstanding so that it drains to the proposed network and allow some new hardstanding additions to drain freely to the existing network. The proposed drainage strategy results in a marginal net decrease in the area of the site draining unrestricted to the existing network.

The foul water will discharge via an existing manhole via gravity. All drainage will be designed and constructed in accordance with the Building Regulations Part H, the Sewerage Sector Guidance (SSG), the Design and Construction Guidance (DCG) and any other relevant legislation, guidance or standards as deemed appropriate.

Energy Usage Summary

Our estimated EUI is as follows

Loads	Annex 2H EUI Target kWh/ m <sup>2</sup> .year	Our Proposal kWh/ m <sup>2</sup> .year
Space heating	8	7.18
Lighting	8	7.30
Lifts	1	1
Small power	25	Small Power: 10 Server: 7.73
Catering	7	7
Fans and pumps	2	2
Domestic hot water	5	4.90
Building related services	2	2
External lighting	6	6
Cooling	-	1.68
<b>Total Energy Consumption</b>	<b>67</b>	<b>56.79</b>



11.1 Energy Strategy

The energy strategy for pinn river follows the energy hierarchy - Be Lean - Be Clean - Be Green - Be Seen.

Additionally the project as been designed in accordance with the Harrow’s Local Plan ( Core Strategy) 2012, Harrow’s Local Plan (Development Management Policies) 2013 and London Plan.

To help achieve this target, Ridge have provided specialist input in developing the performance criteria of the building fabric, and services such as ventilation, heating, and lighting.

Be Lean:

A range of passive design and energy efficiency measure are targeted for the proposed development including;

- Fabric insulation levels achieving improvements over the Building Regulations Part L (2021).
- Suitable glazing ration and glass g-value to balance heat losses, heat gains and daylight ingress.
- Fabric air permeability improvement upon Building Regulations Part L (2021)
- Insulated pipework and ductwork to minimise hear losses and gains
- Variable speed pumps to minimise energy consumption for distribution of services.

A range of active measures are targeted for the proposed development are

- Inclusion of mechanical ventilation and heat recovery

- Inclusion of energy saving monitoring equipment including heating controls, PIRs and meters
- Highly efficient LED lighting.

Be Clean

The proposed development is not in or near an ‘Opportunity Area’ for the implementation of a head network and there are no existing heat networks ear by. Therefore, and due to the location and space constraints, the proposed development is not design to be provided with a means of connection to external networks. Further more the benefit of a CHP engine is based on the head carbon factor which is derive from the CHP efficiency, gas carbon factor and electricity factor of the national grid. As the electricity grid is expected to be progressively decarbonised., it is likely that the carbon savings from CHP will substantially diminish as time passes.

Be Green

A preliminary assessment of incorporating zero carbon energy systems has been undertaken. PVs was determined to be potentially suitable for the proposed development. Therefore, a 1500m2 of PV array shall be included on the building.

Be Seen

Monitor, verify and report in the energy performance of the building when it is finally constructed and occupied.





Ariel view of the building

## Planning Base

On the basis of the analysis set out in this document and the accompanying Planning Statement, it is considered that the proposed scheme comprises sustainable development in the context of the policies set out within the NPPF (National Planning Policy Framework) and accords with the Development Plan. In summary, the proposal is considered:

- Environmentally Sustainable: This proposal seeks to make effective use of the site, providing a variety of internal and external spaces. This proposal seeks to deliver a high quality and environmentally sustainable school building.
- Economically Sustainable: This proposal seeks to enhance the educational facilities for Pinn River SEND School improving the school's facilities, which are currently housed in Sun Shine House building.
- Socially Sustainable: This proposal seeks to enhance education provision within Hillingdon ensuring modern learning spaces places are available to meet the needs of existing and future pupils.

The proposal comprises a well-designed and high-quality building, which is appropriate to its context in terms of urban form and materials. The building is of scale that will respect the amenity of the neighbouring school and tree canopies.

## Design Conclusion

The design has been developed over a number of months with interested parties, including the School Contractor, Gleeds Six Foot Studio and DfE.

The proposed school is designed in line with the vision and requirements of The Eden Academy Trust, the design team has sought to create an environment that is safe, secure, and welcoming for the pupils, whilst also ensuring their broad range of needs are met by providing access to high-quality facilities both now and in the future.

The building appearance was designed in close consultation with the school to create tasteful appearance with colourful accents that ensure the facility has its own identity within the area.

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