3.3.1. Views

View of proposed main entrance

View of proposed canteen and stairs

3.4. Landscape Strategy

3.3.2. Landscape objectives

The key aspects of the landscape brief have been driven by three main factors;

1. The client's requirements.

2. The adoption of sustainable urban drainage systems (SuDS) due to new legislation by the Welsh Government.

3. The meeting of ecology targets in order to achieve a BREEAM rating of excellent.

The proposed school has a focus on providing excellent sports facilities for their prospective students, with particular attention to providing adult rugby and football pitches. The Building Bulletin 98 (BB98) Briefing Framework for Secondary School Projects: Publication by DCSF sets out area guidelines for secondary school buildings. According to these guidelines, the recommended net site area is 64,700m2. The proposed net site area is 55,632m2, as this is below the recommended minimum it enters this site into the category of a 'confined site'. These guidelines have helped inform the spacial arrangement of sports pitches whilst balancing this against other BB98 guidance on hard surfaced games courts, soft informal and social areas, hard informal and social areas and habitat area. The landscape has been able to fit the maximum number and size of a variety of sports pitches whilst allowing excellent opportunities for other student activities.

The proposed scheme provides 116 standard car parking bays (including 2 electrical vehicle charging points), 6 disabled car parking bays and space for 6 motorcycles. This meets both the Vale of Glamorgan Supplementary Planning Guidance - Car Parking Standards 2015 and the BREEAM (2014) Guidance. The proposed scheme has 65 secure cycle parking spaces which meets the Vale of Glamorgan Supplementary Planning Guidance requirements.

The new SuDS legislation adopted by the Welsh Government is Schedule 3 of the Flood and Water Management Act 2010 introduced on 7th January 2019. This stipulates that all surface water is managed through a holistic network of SUDS elements across the proposed scheme. The BREEAM ecology targets ensure there is not a reduction in species numbers once the project is complete. To accomplish this, the design aims to improve biodiversity by creating an interconnected landscape of corridors ensuring wildlife can easily commute across the site.

Many of the features in the proposed scheme are multi-functional providing an opportunity for the creation wildlife corridors, improving amenity values and creating engaging and social spaces for students.

Bio-retention gardens at the front entrance and building courtyard, capture surface water and improve amenity and bio-diversity through the use of plants that are able to withstand extremes of both wet and dry conditions.

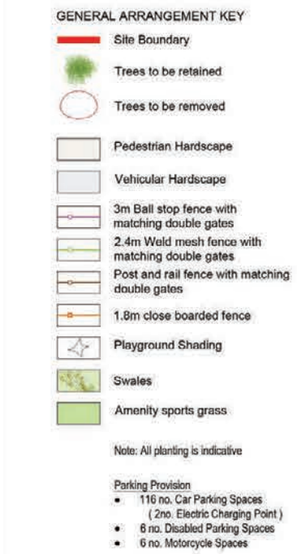
Swales have been used to create a green corridor of wild-flower and ornamental planting which enhances the visual appeal of the playground spaces. The detention basin at the end of the suds train is a large organic land form, that has adjacent v informal earth mounds (that uses excess site cut) creating an engaging 3D landscape enhancing the visual and play appeal of the soft landscape areas.

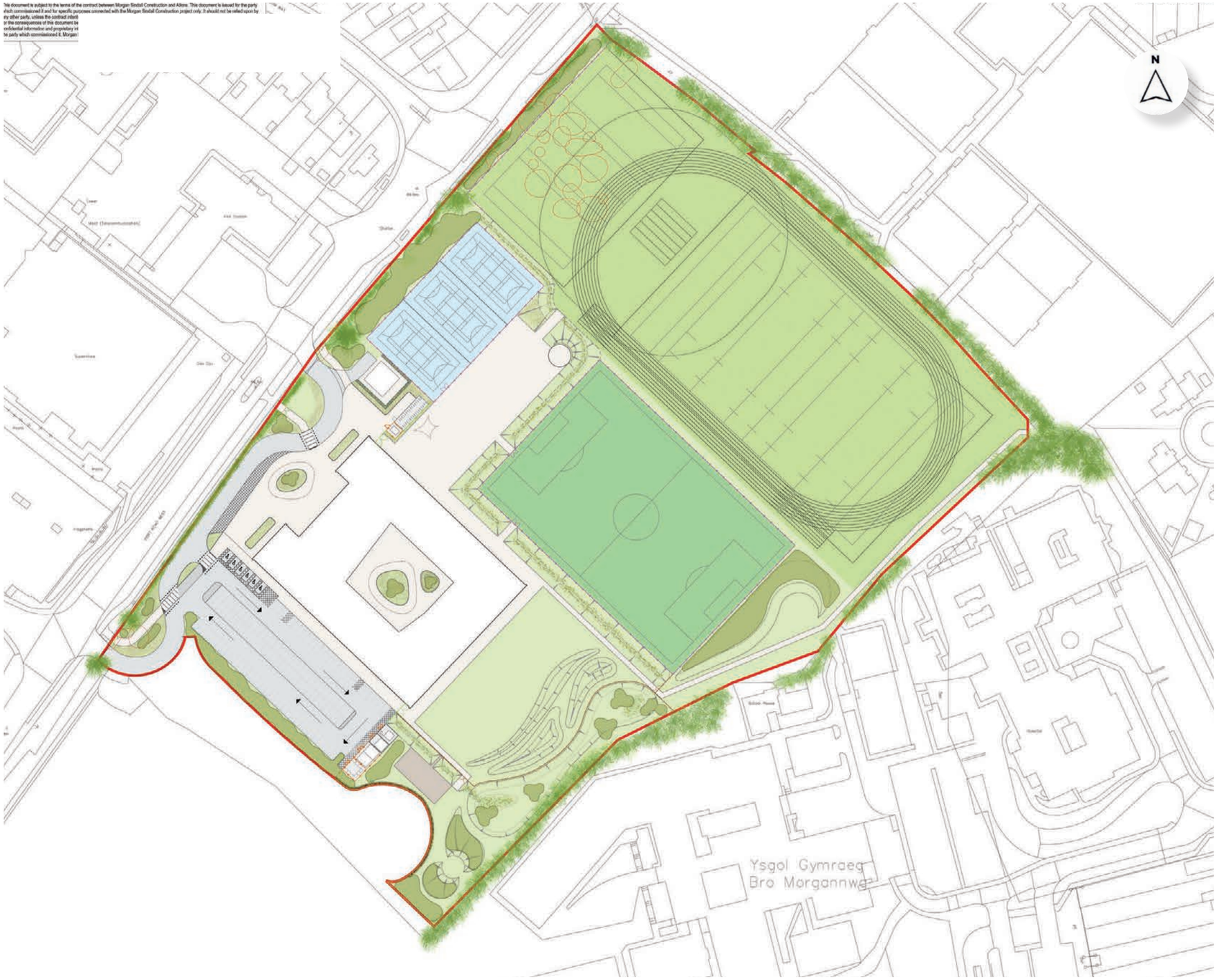
Each suds element provides the opportunity for a diverse planting scheme and overall contributes greatly to increasing biodiversity on the site. Habitats ranging from dry to marshy have been designed into the scheme allowing for plant diversity. The planting palette includes, species rich grassland along swale edges, wild-flower planting in the swale base and ornamental planting for wet & dry conditions in bio-retention gardens, the diverse mix of planting will establish to become a valuable habitat of food and shelter for wildlife. The detention basin has been planted with native & non-native trees that are able to withstand extreme wet & dry conditions, once established the trees will also offer valuable habitat and amenity improvements. Importantly, the arrangement of the suds elements combined with the diverse planting species creates a green corridor for wildlife to live, thrive and commute across the proposed school site.

Although the use of SUDS provides site wide outdoor educational experiences, the landscape design has also introduced specific areas for outdoor teaching. This has been provided within the BB98 habitat area which provides an area for an allotment, a sensory garden full of culinary herbs and an adjacent orchard and forest garden.

The landscape department has worked very closely with all the design departments, especially the architects and the civil engineers, this multidisciplinary approach from an early stage has enabled us to produce a functional and attractive design solution for our client.

2.4.2 Landscape proposals





3.4.1. Indicative Planting Choices

Specimen Shrubs


Ornamental Planting



Memorial / Sensory Garden



Swale Planting



Bulb Planting



Bio-retention / Rain Gardens



Trees



Native Woodland Planting


Native Hedgerow Mix


Forest Garden

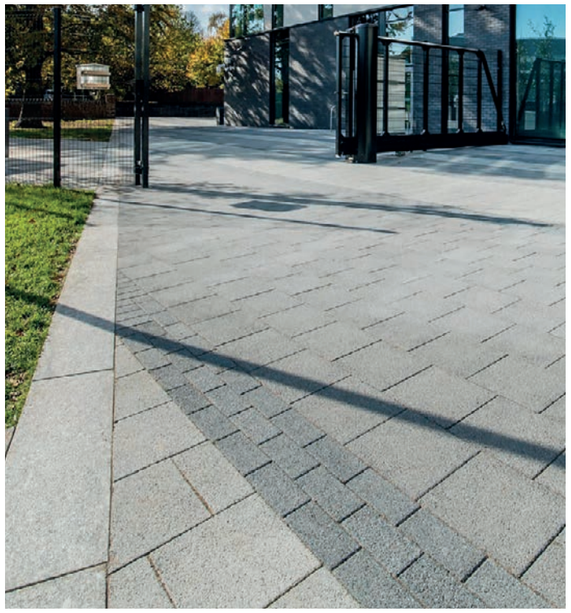
3.4.2. Indicative Landscape Materials & Features

Insect wall and other ecological habitats

Shade sail

Raised vegetable beds for easy access

Tarmac finish



Front entrance block paving

Ball stop fencing

Timber Post & Rail Fence

3.5. Access

3.5.1. Proposed Access Strategy

The current access to the Whitmore site is primarily from either Port Road West, or from Colcot Road across the footpath to the north of the school. Both of these links would be maintained in order to keep the access to the school as easy as possible. A site entrance will also be formalised in the North East corner of the site (closest to Barry Hospital) to allow students to cut across the site before and after school times.

All the primary pedestrian access would be Equality Act 2010 compliant.

Vehicles: All vehicles will enter through the existing entrance off Port Road West. The existing bus drop-off will be widened to ease congestion and the car park and deliveries zone will lie to the south of the new building. Access to the Bro Morgannwg bus drop-off will also be to the south of the car park.

3.5.2. Pedestrian, Cycle and Vehicle Access Routes

The intent of the new building is to create a united provision for the students and staff of Whitmore High School, and also to create a public-facing welcome and showcase of the school's activities. The new building will have its main access on the main elevation facing Port Road West. This will consist of two entrances: a student one which will be opened for before and after school access and egress; and a visitor one which will be the main entrance during student hours.

Should the school's sport facilities be used by the community the door to the South West of the building, adjacent to the car park, would be use used for access. This would give access to the sports facilities and changing rooms only, with the other facilities and rooms capable of being locked off for security.

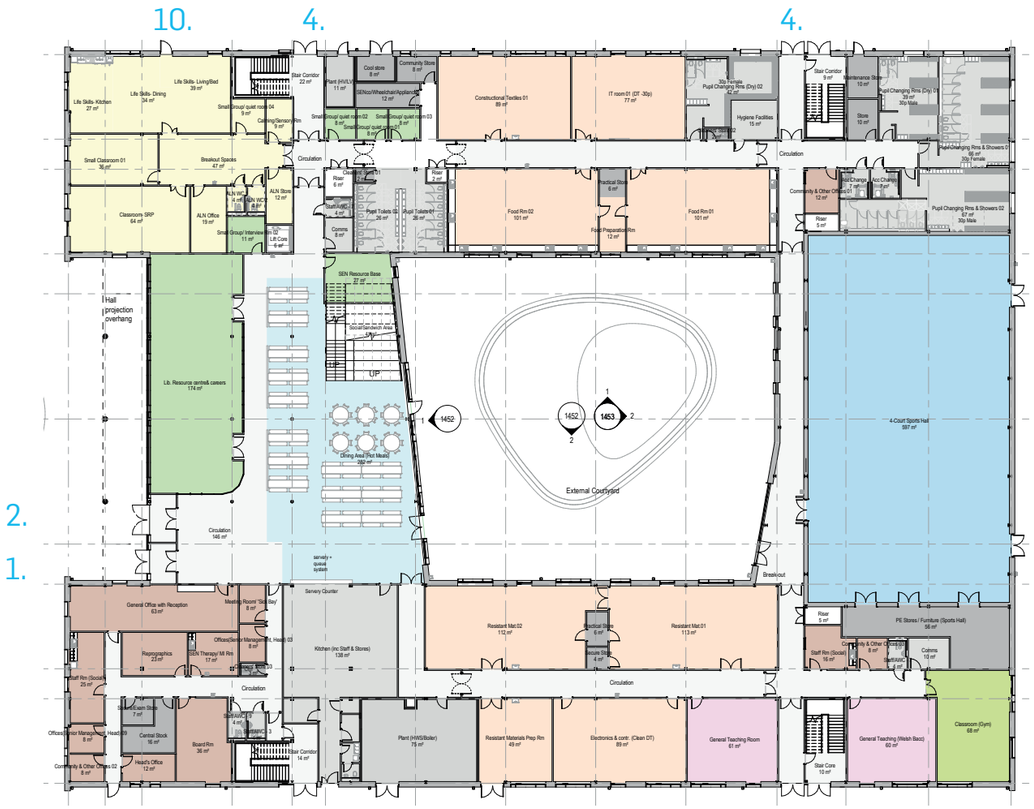
Other doors on the ground floor are primarily for access to the grounds during the school day but are also to be used as fire escapes.

3.5.3. Vehicular Access

1. Delivery vehicle / servicing access is adjacent to the south façade of the building, beyond.

2. Car parking will be accessed from the bus loop and provide a safe location for cars away from pedestrians.

3. Emergency vehicle access will be gained on the front and south sides via the bus drop off and car park. Access to the north side will be via an access gate to the social play area. The adjacent electricity sub station will have 24hr access.



1 – Primary Building Entrance

2 – Student Building Entrances

3 – Sports Entrance

4 – Fire Exit

5 – WHS bus drop off

6 – Bro Morgannwg bus drop off

7 – New pedestrian path

8 – Deliveries point

9 – Cycle shelter

10 - ALN Pupil Entrance

11 - Community Entrance (Sports)

3.5.4. Building Access - Pedestrians

The Building is in the southern perimeter to the WHS Site and sits on a plateau of land circa 1m above the adjacent Bro Morgannwg school site to the east and south. The site plan and landscaping on the WHS site has been designed to accommodate this level change within all pathways and routes provided as 1:21 or less slopes (no ramps or steps). This has not only ensured there is no separation in use by any ability but it is equally supportive of the use of the building for delivery trolleys accessing from the car park side.

Internally the building's facilities are arranged over three levels that are all a uniform level with no changes in floor level across each storey. All levels are served by one lift which complies with the Building Regulations in terms of distances and car dimensions. All the doors are a minimum of 840mm clear opening and the main circulation is generally wider that 2m except for some small areas of single direction low occupancy where it reduces to 1800mm and 1500mm as a minimum for short connections.

The building has been designed and will continue to be developed in detail as fully compliant with approved document M: access to and use of buildings, The Equalities Act 2010 and BS8300:2018 (Part 1 &2). Further to these design benchmarking standards the Vale of Glamorgan's Equality Policy has been consulted during engagement workshops to ensure the school remains and continues to improve its Access For All Policy.

Main entrance

The main entrance to the building is clearly visible from Port Road West and is at the main welcome point for the building.

The visitor entrance and the student entrance will operate slightly differently:

- The Student entrance will have sliding doors to maximise the flow of people before and after the school day and after tje school day the student and visitor entrance will not operate during the school day to ensure that any student arriving or leaving is accounted for.
- The main entrance will be open throughout the school day, allowing access to visitors and students who arrive and leave during this time. The access control will be controlled from the office.
- ALN Entrance this entrance will be available for the students using the ALN provision as a separate entrance door throughout the day.

The primary vertical circulation (i.e. stairs and lifts) are easily accessible to the left of the main entrance. The balcony edge above provides clear visual orientation to the internal circulation at each level seen from the main entrance. The lift running to all levels is located a short distance from this main entrance atrium to the north.

Other than the main entrance there are four fire exits, two on each wing, the south eastern one of which will be the community sports entrance. The doors on the north wing will double up as access doors to the school grounds. These secondary access doors will be power assisted double swing doors with push button internally and access control offset totem external control. External door guarding will protect from the free edge of the doors. The main and secondary glazed entrance doors will have suitably contrasting manifestations.

Other than these entrances to the building there are deliveries entrances to the DT room and kitchen, the plant room and the electrical intake room, as well as an evacuation door for the admin suite. All these access points are designed to provide the appropriate level of access and security. All doors will be of sufficient width and flush threshold to accommodate all users and their activities as appropriate.

3.5.5. Community Safety

The design has been progressed with the aim of making the site secure for the users whilst at the same time creating an attractive and welcoming facility. The team has met with Gwyn Batten, the Designing Out Crime Officer, to identify the various elements in this regard and to develop the designs accordingly.

The proposals have been developed to create a simplified access to the site and the building, and to create a secure line around the perimeter of the site. This will make use of the existing perimeter fencing to the north and east, as well as that on Port Road West. New fencing will delineate the south and the boundary to the car park. The building will become the secure line at the front and the south façade. The passive supervision innate to the design of the school will be supported by external lighting and CCTV.