



Edinburgh's Learning Estate Strategy

Outdoor Brief: Secondary Schools

This document sets out our requirements for external space in City of Edinburgh Council's secondary schools, it should be provided to the project team at the start of a new secondary school build or external redevelopment to brief the design of the external areas in conjunction with the relevant learning estate brief.

The provision, design and value of external learning spaces are to be considered as important in our learning estate as the interior learning spaces.

This approach will support creative use of outdoor space and help to connect people with nature. This connection should extend to interior design, creating a mutual two-way relationship between internal and external learning landscapes, promoting positive health and wellbeing through biophilic design and free flowing indoor outdoor spaces as seen in our Early Years estate.

1. Accommodating Outdoor Learning as part of the Project at RIBA Stage 1

A landscape architect's input should be part of the project team on a new build at Stage 1, to influence how the landscape works with the design and position of the building on the site. The landscape and building should not be treated as wholly separate and landscapers, architects and interior designers need to collaborate to create the entire learning environment. Interior design remit will extend to external breakout furniture, architects must design the building with external breakout and shelter in mind.



"We want our school grounds to be inspiring spaces that are safe and inclusive and improve wellbeing. They should provide diversity in learning experiences and play opportunities and promote social and environmental responsibility."

~ City of Edinburgh Council's Vision for School Grounds

2. Budget and Value Engineering

A landscape budget must be established at the start of the project as a percentage of total project cost. This must include specific items deemed a priority set out in Section 8 Table 1 in this document. The expectation is that through consultation with the client and user some elements budgeted for may be removed from the plans and replaced with a tailored option but the budget for these items must be protected to allow this.

The learning and play landscape will be treated with as much regard as the building; value engineering should reflect this with a balanced approach.

The landscape design will prioritise budgeting for the inclusion of all play and learning items detailed in section 8 before adding features that only serve for aesthetic purposes. Exploration of multipurpose features is encouraged and designers should look to achieve learning and play value through creative, budget friendly solutions and materials. Exploring use of recycled and reclaimed items sourced locally would benefit the design budget as long as safety of users is not compromised.



3. Approval and sign off

All landscape proposals must be submitted to CEC Playground Development Support Group for approval ahead of sign-off at each RIBA Design Stage and prior to submission of Planning application. Contact Playgrounds@edinburgh.gov.uk

4. Building placement within the site

The building shouldn't be placed in a way that it would compromise the ability to deliver the playground brief.

The building should not overshadow the playground in a way that makes quality space unusable/undesirable. Allotment/kitchen garden location should be considered for best conditions.

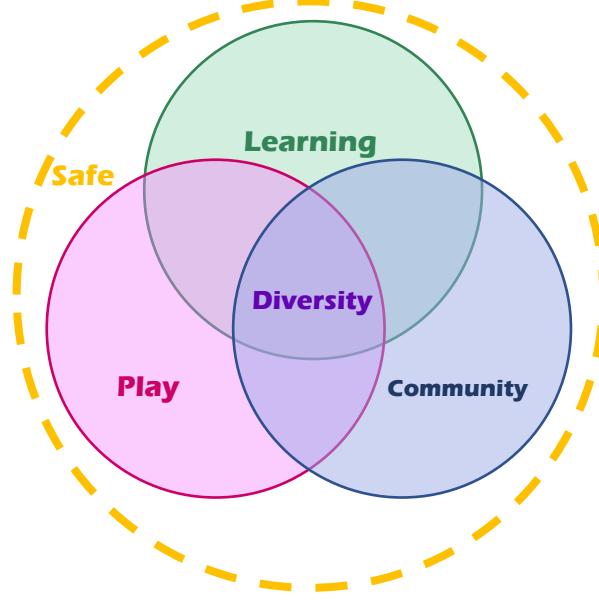
Use of the landscape for play and learning and community use should be celebrated through the design by keeping it in view and close to the building.

5. A Playful Learning Landscape

The outdoor space must include the following key components:

- ★ Spaces for outdoor learning
- ★ Spaces for play & social activities
- ★ Spaces for the community

There needs to be diversity of each of these components and all should be provided in an environment that is as safe as necessary according to RoSPA guidance and to allow a risk-benefit approach



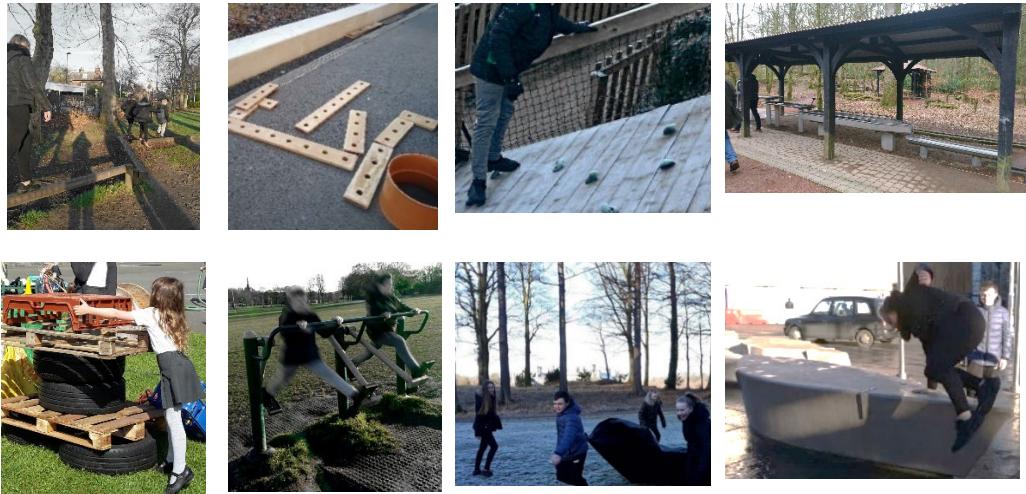
5.1 The Importance of play

Creating playful spaces in the school grounds within Secondary is incredibly important for developing social, cognitive and gross motor skills, along with imagination and creativity which are key attributes in a world where more jobs are becoming automated.

The school grounds must reflect the growing needs of its users at Secondary a focus on active play, STEM features for explorative play, team games and fitness.

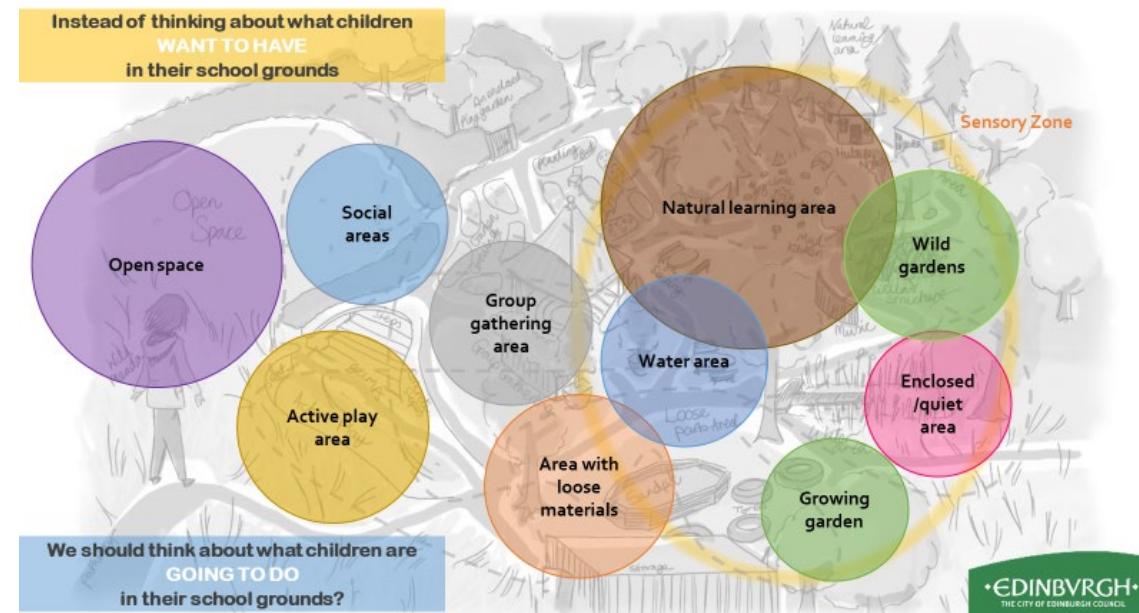
Consultation with the students is essential to understand the **things they want to do** in their school grounds. Understanding that will allow designers to be creative in what they provide rather than being restrained by requests for specific items such as "swing or slide".

As shown in the Venn diagram the grounds should have elements of blended learning and play; features that allow "learning through play" such as loose parts or sand pits with digging, pouring and hauling equipment.



6. Activity Zones Adjacency Diagram

The activity zones below were developed to indicate priority space types within the school grounds that allow the variety of activities we want to provide in our settings. See our [school grounds vision document](#) for more detail. Landscape architects will deliver a site plan at stage 1 showing the below Activity Zones and how they connect with the building and link with each other.



7. Outdoor Learning

The outdoor learning spaces are defined as **BREAKOUT** or **DESTINATION** spaces.

7.1 OUTDOOR BREAKOUT: Free Flowing Learning Environments

Learning Zones/faculties should be designed to have immediate access to an external space that can be developed into a class/faculty specific learning area for a free-flowing extension of their internal learning space. For example, Science: Biology – a botanical growing space, Physics – equipment allowing learners to dig, use water etc. playful acoustics etc. A good example is the STEM playground at Dumfries House.

For classes located on 1F these ideally would have immediate access to ground level breakout via staircase or a terrace on a balcony outside their classroom.

These outdoor breakout spaces must have shelter; a canopy from the building covering some of the breakout is required. The ability for passive supervision from inside the learning zone is required.

These breakout spaces must be designed to be flexible and reflect the learning requirements of staff and students highlighted in consultation. They need to be moderately equipped with storage, seating, planting etc. to avoid looking bleak and uninviting, discouraging use. The interior design team will design and furnish these spaces as an extension of the interior learning environment. Boundaries should be soft where possible.

7.1.1 Secondary outdoor breakout spaces:

STEM ZONE: science playground & growing

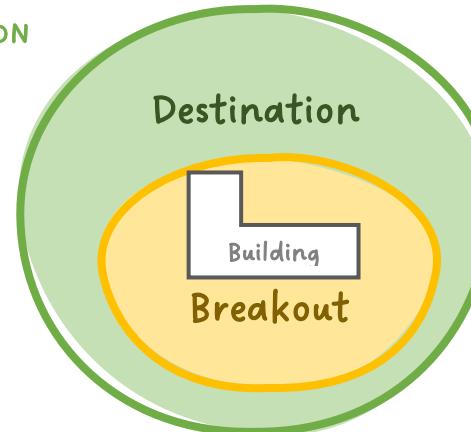
Drama/Dance: amphitheatre

ASN: private/quiet garden for wellbeing & reflection.

CDT: Skills yard

HFT: kitchen garden

ART: messy/ventilated work, natural spaces to inspire.



7.2 DESTINATION Learning Environments

The free-flow breakout spaces are complimented by a variety of destination spaces located throughout the school grounds.

Destination spaces are the shared features such as Woodland, Allotment, Pond, Wildlife Garden etc. that a teacher would take a class to during their lesson.

Depending on the space and its distance from the school building; we should aim to provide for the basic needs of the teacher with little requirement to bring along extra resources. For example, Science: Biology lessons could happen at an area of the grounds designed as a biodiverse nature reserve including a wildlife hide. If the destination space is far from the building, for example in a woodland on the edge of the grounds, a sheltered outdoor classroom should be provided. For spaces such as allotments or pond; a shed should be provided to allow storage of equipment to use at the site. This aims to break down barriers to using outdoor spaces.

7.2.1 Features in the Local Area

If school grounds space is constrained or budget very tight and destination spaces from the kit of parts detailed on the following pages are available and easily accessible by foot within the local area; these can be planned in for use by the school. Designers will need to show the client and user groups this intention by presenting a map of the school and surrounding area indicating all of the "kit of parts" and showing where the school can access these features if they are outwith the site boundary. For example highlighting the local woodland or stream and how the school would walk there. It may be necessary to include gates, paths etc to ensure the area is easy and safe to access.

8. Our School Grounds Kit of Parts

We have developed a “kit of parts” which includes our priority elements to include in the landscape design alongside the SportScotland guidance.



Mounds



Open space



Woodland

8.1 Woodland

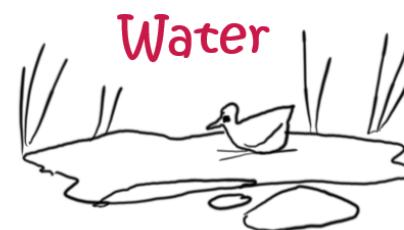
A woodland should be planted if none already exists on site or in the local area. A variety of native trees of different maturity should be included to create at least a partially usable space within the first few years of use. A campfire space with seating should be included here.

8.2 Shelter

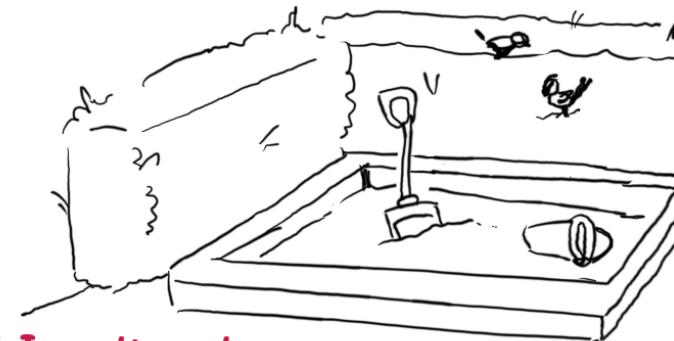
Canopies for outdoor breakout directly from the building should be included. Beyond the building perimeter, some sheltered spaces are required. Key spaces are sheltered outdoor classrooms at key destination spaces: pond, allotment, woodland/nature habitat. These require seating and storage and should protect against the wind and rain.



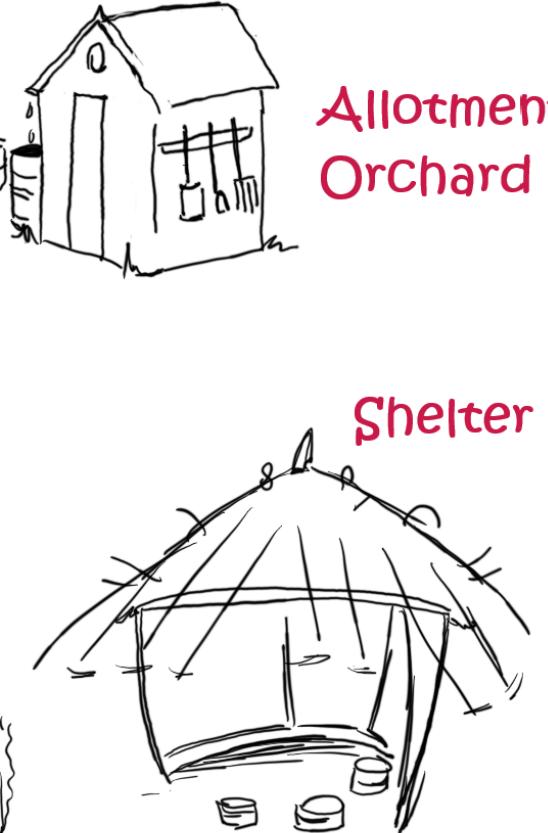
Allotment & Orchard



Water



Sand



Shelter

8.3 Retreat Spaces

Nooks and hideaway spaces should be created to allow users to take a moment to be on their own, willow dens and little huts are a good solution.



Social spaces



Retreat spaces

8.4 Open Space

An area of hardstanding that can be flexible for use as a multi-use games area, all weather outdoor learning and pop-up activity space. Grassed open areas are also good for ball games etc.



Wild gardens



Active play

8.5 Wild Gardens

Biodiverse spaces that are planted to attract wildlife and support learning, easily accessible to study birdboxes, bug hotels, hedgehog homes etc.

8.6 Sand

Sand as part of a STEM playground should be located beside a water source for best use. For this age group providing pulleys etc that can be used for experimental learning and play is best. Areas should be designed to shelter the sand from dispersing out of the area using timber framing and planting such as dense hedging.

8.7 Mounds

These create a more interesting and playful landscape and can be used for play and learning. Large or multiple mounds are recommended to spread the footfall. Stepped mounds can create informal social areas

8.8 Social Spaces

A variety of social spaces should be provided for different users and group sizes. There should be multiple spaces around the site and consideration of seating outside main entrance areas should be made.

8.9 Active Play

Active play should be catered for to develop gross motor skills. This can be presented in a variety of ways but should always be influenced through user consultation. Engagement with secondary students showed that learners in S1-S3 enjoyed playing on exercise equipment, playground equipment such as swings, trim trails and climbing walls, exploring pathways and shelters in a fort. The majority of the teenagers were keen to explore more active play such as parkour and riding their bikes somewhere fun where they can develop their skills.

8.10 Allotment and Learning for sustainability

Within the school grounds should be a school allotment as a destination space and a dedicated kitchen garden as breakout for Food Technology.

School allotments should be created with the intention for the school to continue to develop the space as they want it. The initial design should include the following:

- a number of raised beds and in ground growing beds (consult school on number)
- an external water source such as an outdoor tap
- a polytunnel
- edible bushes (berries)
- a fruit orchard
- a shed
- a food waste composter

Having a space on the school site that can be developed and constructed by the school to learn about green technology and sustainable living would complement the allotment; providing water, compost, energy etc to help in food production.

8.10.1 Community space

A space for a community allotment should be provided with close adjacency to the school allotment to allow shared learning and ease of maintenance. Community space should have a water source and adequate depth of quality earth for planting. The community will then be encouraged to build their space as they like, in return the community group will maintain a good relationship with the school through shared learning and assist in maintaining the school allotment during the holiday periods.

8.10.2 Food Technology and Hospitality Courses

Food Technology should be supported by a kitchen garden linked to the dedicated internal learning space as external breakout. This will need to be positioned in an area of the grounds that gets enough sun, provides some shelter, can be further developed and have links with a community growing space.

Providing some seating for Hospitality in the kitchen garden would enable people to eat food cooked by students while being surrounded by the food you're eating growing around you. It will be a place to be proud of, can facilitate events and encourage field to fork ethos.



8.11 Water Feature or Pond

A water feature can be as small as a puddle pond or big as a SUDS pond the benefit of experimenting with water and creating habitats in wet ground is the value we require. If providing a pond; a boardwalk is important to allow pond dipping.

8.11.1 Designing out risk

It is important to have key signage visible to users for awareness and to create levels as an informal barrier that slows access to the water's edge. At secondary level students should have some understanding of risk and the environment provided can help with their learning of how to behave around water. The following is suggested particularly if young children will have access to the site: First a child would encounter tall and dense planting then the access to the water would be a shallow gradient of rocks, shallow water, gravel/rocks. The idea would be to slow down a young child but allow an adult to rescue a child easy and quick.

We do want to promote access to the water's edge and the body of water for observation and learning, so a balance must be struck between these two conflicts. Having obvious designated access points that parents of young children can avoid will lower the risk but these too should be a shallow gradient into the water with no steep drop offs. A boardwalk should be installed to give access to the body of water which will provide different things to see.

A boardwalk should be designed in line with those installed at Figgate (pictured) and Inverleith parks, it should have a handrail and non-slip surface on the planks. Ideally like in the image the handrail will have openings to allow someone to crouch and observe at low level.

9. Features and Equipment

The following list of items has been compiled based on briefing and delivery of multiple outdoor spaces. Each item will differ for each project as the character of the site and the user's preferences are taken into account. How these items are interpreted are down to the designer and may change through consultation, however they should be accounted for initially within the budget and site planning.

Secondary

Sheltered breakout space from each faculty zone (canopies see 7.1)

Dense hedge boundaries with fencing support (see 17)

Grass turfed areas

Mounds (see 8.3)

Wild meadow planting in areas across site (see 8.5)

Sensory planting around retreat and quiet social areas

Trees varying maturity creating woodland (see 8.1)

Open tarmac courtyard (see 8.4)

Line markings on tarmac (see 8.4)

Pathways for exploring and accessibility (see 21)

Sandpit (see 8.6)

Water feature (pond/wetland) (see 8.11)

Active play equipment (see 8.9)

STEM play equipment

Loose parts store (see 19)

Willow tunnel/shelters (see 8.3)

Sensory garden for integrated support (see items detailed in 11.1)

Campfire seating circle (see 8.1)

Outdoor taps (located by allotment and sand)

Kitchen garden adjacent to Food technology (see items detailed in 8.10)

Allotment (see items detailed in 8.10)

Community allotment (8.10.1)

Outdoor classroom – shelter with tables/seating and store (anticipate two) (see 8.2)

Outdoor dining/social covered picnic benches (see 18)

3G pitch according to SportScotland standard (see 10)

Football pitches according to SportScotland standard (see 10)

Wet weather gear drying area (see 15)

Storage for wet weather gear (see 15)



Table 1

10. Secondary Outdoor Sports

Scope of outdoor sports provision needs to be agreed at RIBA Stage 1. Outdoor sports provision in terms of quality should be informed by the SportScotland guidance please refer to [the guidance for playing fields by SportScotland](#). Understanding the school's preference of football, rugby and hockey will determine the type of artificial pitch to install and what their needs are for the grass pitches. The sports requirements will need balancing with ambitions to create a learning landscape.

10.1 Sports Consultation

Consultation with City of Edinburgh Council Sports Development Officer, SportsScotland, Edinburgh Leisure and the school is imperative in determining the sporting requirements for the outdoor space.

10.2 Artificial Pitch

Through consultation determine whether the pitch should be compliant for combinations of football, hockey or rugby.

A pitch for football and rugby should have the following:

- Rugby requires a pitch 112m x 65m (this includes in-goal areas)
- Football requires a pitch 100m x 60m (although can reduce if required)
- A 3m safety run-off zone around the pitch perimeter
- A 5m high perimeter fence
- Recesses for goal post storage
- Floodlighting requirements will be at the lower end of the lux scale as it is only likely to be training taking place when these are required
- Consideration of neighbour impact of noise and lighting to be assessed and reduced as much as practical
- Spectator space (if possible)
- Team shelter (if possible)

10.3 Recommendations

An athletics track would enhance the sports provision at little cost by incorporating it into playing field line markings.

Access from outdoor changing to the 3G pitch must be via hardstanding and access to changing from grass pitches should avoid impact on other spaces due to mud/debris.

Installing some outdoor fitness equipment near the sports block would create a free and fun space for learners and the community to get fit. Being close to the sports facilities also allows fitness instructors and teachers to take groups outside to use equipment if desired

11. Inclusion: Meeting the Needs of All

Outdoor spaces will be designed to be used by a variety of people including the community, key spaces highlighted in this brief should all be accessible by wheelchair and consideration of how to make each area inclusive is encouraged.

As listed in Table 1, we should be including sensory and inclusive features in the landscape, for example:

- sensory paths,
- items in the play area such as a basket swing
- sensory planting
- quiet retreat spaces such as willow dens.

A good example of an inclusive design for external space is [The Yard](#) in Edinburgh.

11.1 Integrated Support Zone Outdoor Breakout

A sensory garden is required that is accessible directly from the Integrated Support Zone. This learning zone houses internal learning spaces such as Support for Learning, Nurture, a Sensory Room and Enhanced Support base.

Ideally accessible from the Enhanced Support Base and Nurture Rooms; this garden should be screened to offer privacy and gated to provide a quiet student entrance into the Integrated Support Zone for those that need it.

The garden will provide a tranquil retreat space for quiet reflection and should include:

- sensory planting
- running water (if possible)
- somewhere to plant things
- tactile items
- sand
- seating
- shelter
- a retreat space



12. Consultation

Meaningful consultation with students, staff and CEC colleagues is required early in the design phase. Landscape Architects should present an initial plan that includes all learning and play zones and the kit of parts detailed in this brief for consultation with the client and users. It is important to understand how the staff want to use the space to teach and what barriers they feel discourage them and look to resolve these in the design.

It is important to understand how the students want to use their outdoor space for LEARNING, PLAY and SOCIALISING during and out of school hours.

Landscape architects must show the client and users how they have interpreted user input into the design. Multiple workshops with students and staff must be planned into the project, at least one per RIBA design stage 1-3 ahead of each sign off.

12.1 Test Space

With the move to using the outdoors as a learning environment daily, the staff transition period for use of these new spaces should be supported where possible by creating a test space and allowing at least a six-month period for staff to trial the learning space and get comfortable with using it. CPD should be in place over the entire project to support the staff with the changes in pedagogy and giving them access to more outdoor learning resources for taking this forward in their curriculum.

13. Look and Feel

All of our school grounds should be informal playful landscapes that are robust and offer variety for the users. The grounds will be used by a lot of students and people from the community who should feel a sense of belonging and comfort. The landscape and features should appear as natural as possible to encourage a love of nature.

13.1. Soft landscaping design & Maintenance

Our aim is to create a biodiverse natural and informal landscape that encourages nature to thrive akin to that of a small nature reserve. Within this landscape learning, socialising and playing will be encouraged and it should promote a strong sense of community pride. All planting must be non-toxic and safe for children.

The school estate doesn't have budget for extensive maintenance of school grounds. Designers must create spaces that still work and look good when left to go wild and natural. Flat areas of lawn will be mown but hills and mounds will not.

Designs should aim to achieve a [Building with Nature Accreditation](#)

14. Sustainable Practice

A key part of encouraging staff and learners to take their learning outside as part of everyday life is going to be provision of useful features that help remove potential barriers.

A significant barrier to outdoor learning in Scotland is willingness to be outside in wet, windy and cold weather.

Solutions for easy access in all weathers should be designed into the building and landscape. Designers should use canopies and roofed structures to create useable sheltered outdoor spaces; these can be integrated into the design of the building or can be alternatives such as fabric canopies. Barrier matting and easy access wet weather gear storage and drying are all supportive features.

15. Drying Room

Where possible an area should be provided in the building for storing outdoor clothing/boots that works as a drying room. The room should allow access to the outdoors for teachers to take groups through to change before leaving the building. Ideally this should have boot changing benches and an external tap for cleaning and should be located on route to popular outdoor learning areas.

16. Digitally Enabled

External spaces, particularly destination learning spaces and outdoor classrooms should be digitally enabled for teaching to occur outdoors with ease. Social external spaces where possible should be able to connect to the WIFI.

17. Community Access and Security

Secondary school grounds should be fully permeable in line with the Learning Estate Guiding Principles and should adopt a community hub approach allowing community users to access and use the grounds throughout the day.

Landscape budget should not be spent to fence in secondary school grounds and the building with its security measures becomes the secure line for the safety of students and staff.

Inferred and soft informal boundaries should be used where required such as dense hedging with fence support.

18. Outdoor Dining

All outdoor dining areas should include some shelter from the elements all year round; particularly where the outdoor dining is used as overspill from the dining hall.

Encourage use of the outdoors as a dining venue by placing seating in easily accessible areas near the dining hall, with nice surroundings and views.

19. Loose Parts Play

Loose parts play is a learning through play activity that will be led by the school. Introducing this concept into the design should be done through consultation with the users, particularly the students. The school will provide the loose parts over time, so no loose parts need providing by the project team. Loose parts play involves construction of whatever the student imagines using items that are provided. Den building in the woodland is another good use of loose parts play at this age.



Designers should encourage use of loose parts by providing some open spaces which can be grassed or hard surface. A store to keep loose parts in that is easily accessed from these area(s). This should be easy for the students to access to assist tidying up.

20. Waste

Appropriate composting and recycling should be provided in consultation with CEC and FM waste management.

21. Accessibility/Surface coverage

There should be accessible paths that would allow reasonable universal access to most of the areas of the playground and school this should take into consideration users of some sort of disability (mobility, visual, auditory etc)

External lighting should take into consideration the safety of access but also the natural environment conditions (not too little but not too much)

The use of Impervious surfaces should be restricted to absolutely necessary areas (to reduce runoff and demand of suds)

22. Active Travel

Access to the site for users should primarily be from an active travel route.

Designs should ensure that building users have the opportunity and are motivated to travel by environmentally friendly means. The City of Edinburgh Council Active Travel and Road Safety teams should be part of consultation on plans.

23. Different strategic areas/vehicles

Parking allocation for school and community users should take guidance from [Planning](#) but should not impede the ability to deliver the landscape brief for learning and play. Access to the site by delivery and service vehicles to CDT, libraries, waste, kitchen, pool etc and Facilities management maintenance vehicles should be planned into the landscape design in a way that can be managed to ensure safe access for all users of the grounds. Good wayfinding and road marking would help. Emergency vehicle access needs to be planned in for less frequent requirement. Potential to use grasscrete where possible to maintain hard standing but keep natural appearance.

Bicycle shelter allocation should take guidance from [Planning](#) the January 2020 Design Guidance recommends 1 bike space per 9 students. Safe routes for bicycles and pedestrians must be provided throughout the site with crossings over roads limited where possible.

Further reading

This briefing should be read in conjunction with:

[Edinburgh Learning Estate Strategy](#)

[School Grounds Guidance](#)

[Future Schools Website Outdoor spaces](#)

[Future Schools Website: Creating your space](#)

[Edinburgh Design Guidance Jan 2020](#)

[Sport Scotland Guidance](#)

[Secured by Design New Schools Guidance](#)