

# Nairn Academy | Background

Our objective is to develop a new secondary school and community asset that works for the people of Nairn. The school must deliver inspirational learning environments to support young people and generate benefits to the health and well-being of the wider population.



## Overview

The Highland Council recognises the role that parents and the community can play in shaping the education and experiences of children and young people. Accordingly, the vision for the new secondary school in Nairn revolves around facilitating strong community-orientated relationships and providing essential support for both educators and parents.

The aim is to deliver an adaptable and flexible school building and facilities that will better meet future demands and changes in technology and learning, as well as addressing the challenges posed by climate change.

The school building must be considered as a critical component in delivering a unified and comprehensive education. It is vital that pupils are educated in engaging and inspiring surroundings. The detail design of the building will underlie the success of the learning environment which will aspire to encourage creativity, self-expression and build resilient, successful learners.

## Process

The process for the delivery of the new school is split into two halves, design and construction. During the design phases the designers work closely with the technical team within the Council to establish the core principles of the brief. Throughout this period there are regular consultations with community stakeholder groups, the senior management team at Nairn Academy, teaching staff, parents and the pupils.

Currently, we are nearing the completion of the concept design stage. The feedback we receive from this consultation is crucial, as it will not only help us refine the development plan for the upcoming planning submission in the coming weeks but also guide us into the next phase, which is the detailed design stage of the project.

## The Need

It is imperative that we provide every child and young person with the best possible start in life, ensuring they reach their full potential. This is vital in building a smarter, greener, healthier, safer, stronger, wealthier, and fairer community.

The requirement for a new school is firmly established. The current school building is deteriorating, with significant wear and damage that is negatively impacting the learning experience. The new facility will be thoughtfully designed to align with modern teaching methods and will prioritize flexibility and adaptability for future growth as fundamental principles in its space planning.

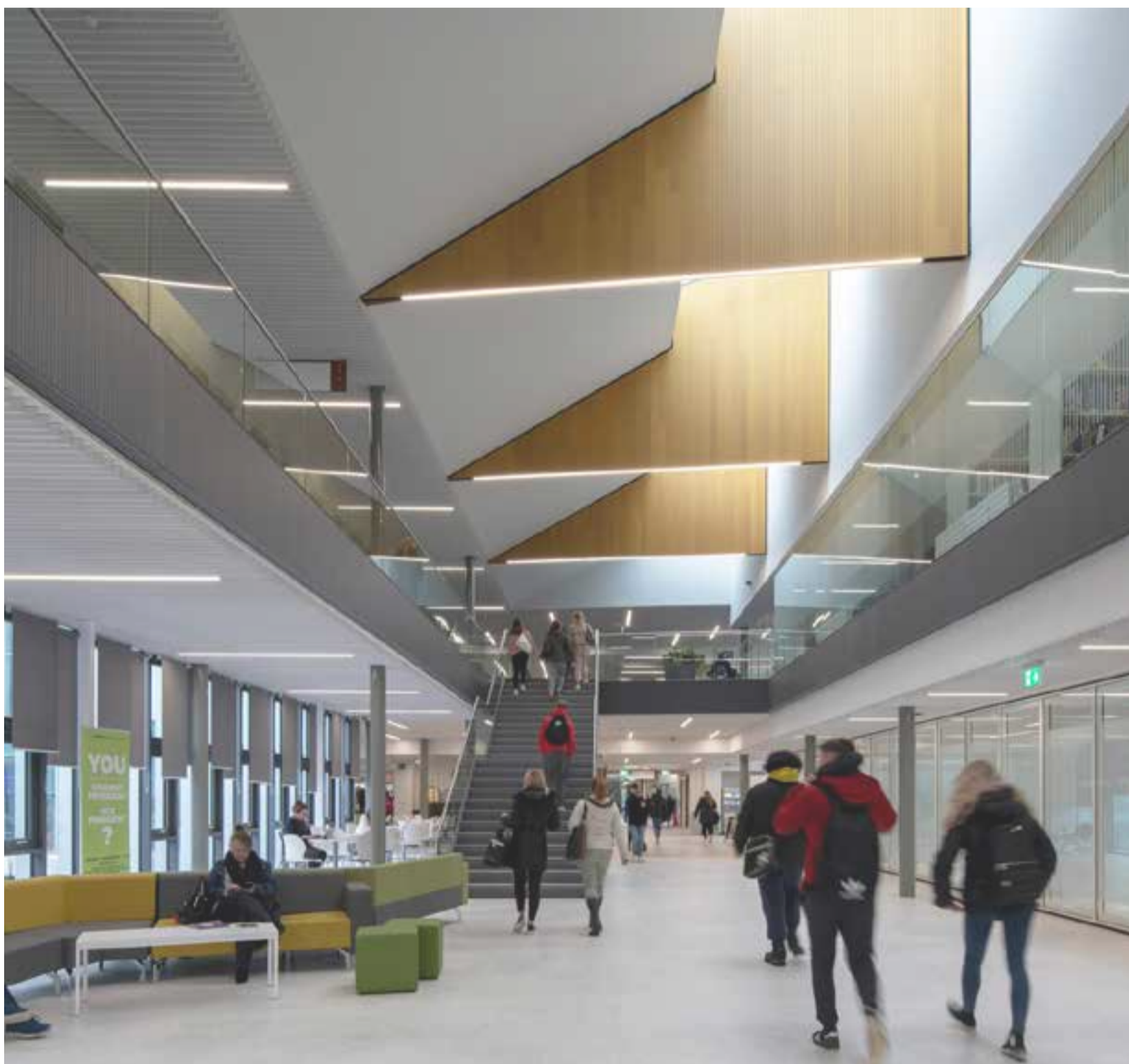
## The Opportunity

The new school in Nairn has the potential to fulfil the educational needs of the town's youth and play a significant role in its regeneration and the broader region. Beyond education, the school's capacity to support a range of activities has far-reaching implications for the entire public sector.

With the expected housing growth, this new facility could become a central hub serving not only educational purposes but also meeting broader community needs such as lifelong learning, employment support, cultural activities, and collaborative spaces. Realizing this potential would require consolidating services, promoting shared facilities, and enhancing flexibility in usage.



# Nairn Academy | The Vision



## Education

At the core of our goals is enhancing the educational opportunities for the youth of Nairn. To achieve this, we must:

- Understand the needs of diverse learners and design accordingly.
- Design an environment that facilitates a student-centred curriculum and enables effective delivery of the Curriculum for Excellence.
- Identify learning and support needs specific to Nairn and the challenges facing a rural community.
- Be informed by a shared vision, values and goals, both at the local and international levels.
- Think creatively about optimising resources within the learning environment.

## Community

The facility's primary function should benefit not only the youth of Nairn but also the broader community, aiming to encourage lifelong learning in the town. The new Nairn secondary school must:

- Deliver a broad curriculum in a rural context.
- Encourage community engagement and intergenerational learning.
- Provide key infrastructure to encourage lifelong learning.
- Improve local services and facilities for the community.
- Develop the youth workforce.

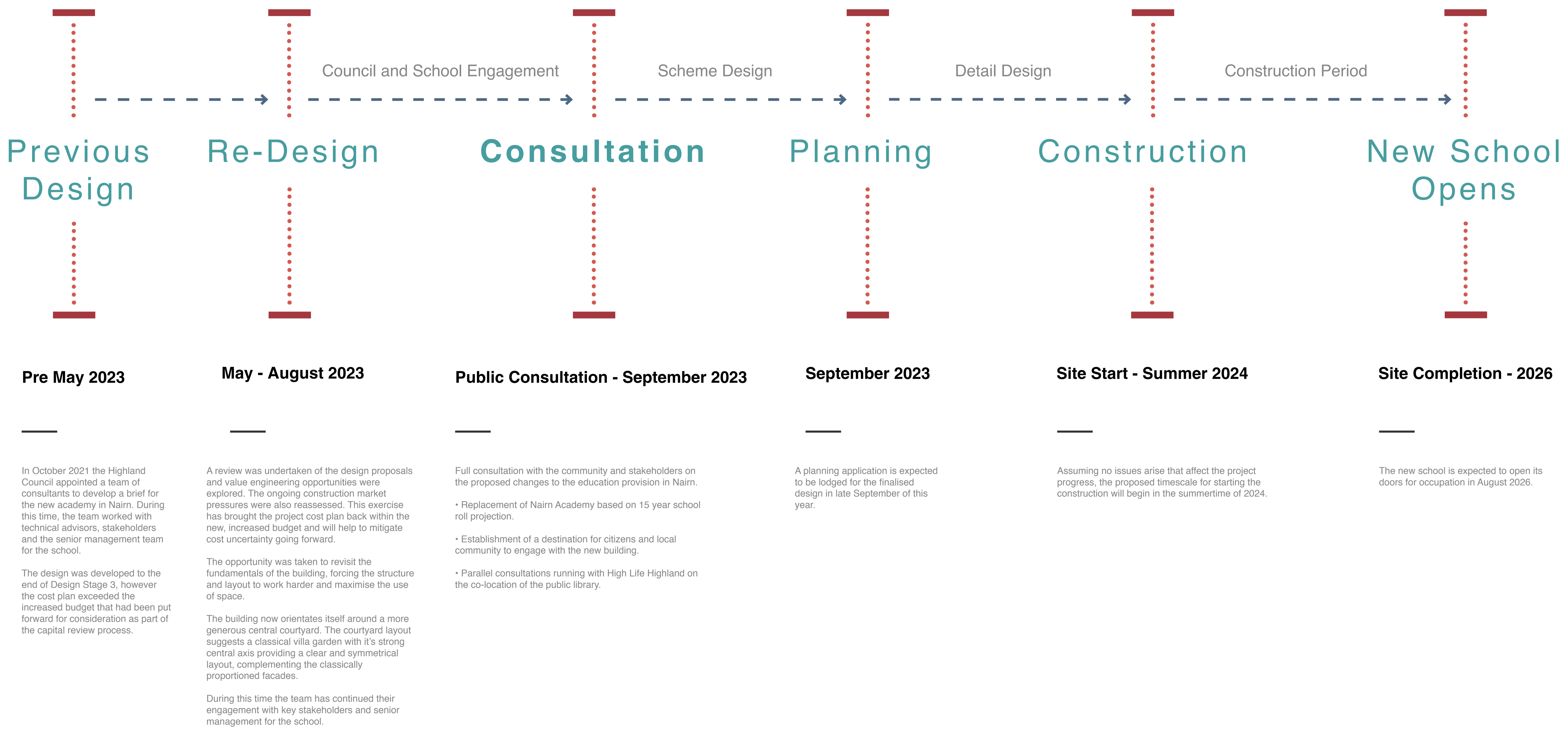
## Culture

Throughout each phase of the design process, there will be a commitment to create:

- An environment that encourages creativity and self-expression to build resilient, successful learners.
- A space that provides variety and flexibility, where users, both teachers and pupils, feel autonomy and control over their daily experiences.
- A building that facilitates a coherent and transitional education experience that maximises opportunities to develop life skills and nurtures responsible citizens.
- A place characterized by a culture of care and learning, where socialisation opportunities promote health and well-being.

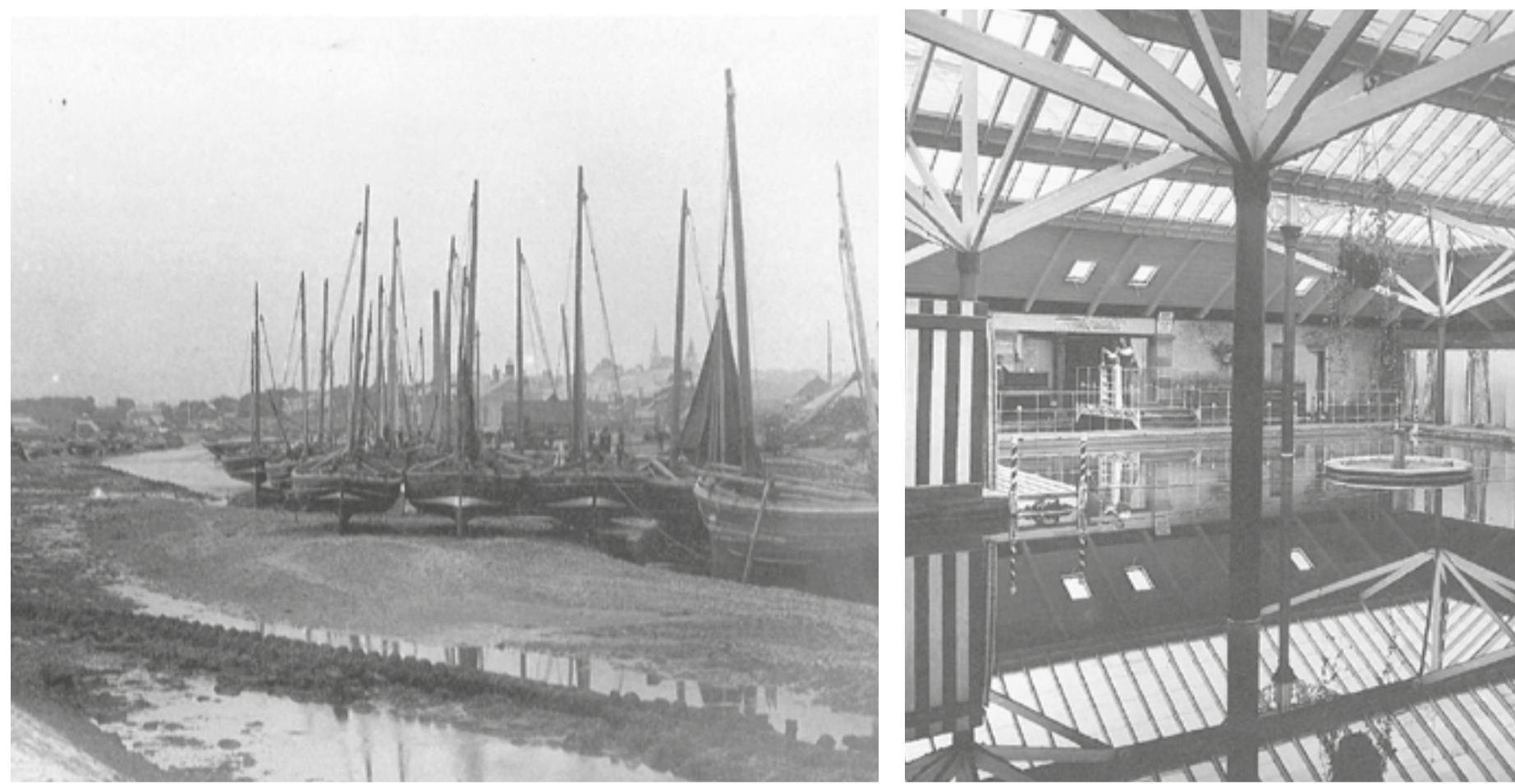


# Nairn Academy | Timeline





# Nairn Academy | Location



## Location

Nairn is situated on the beautiful coast of the Moray Firth inlet on the east coast of Scotland. The town is a 20 minute drive from Inverness and shares the same vistas over the Black Isle towards Cromarty, running along the Great Glen fault. The geological setting for Nairn, and the broader Moray area, is shaped by ancient glacial rock formations. Nairn is positioned at the mouth of the Moray Firth and the Cromarty Firth, both of which are examples of Scottish fjords that have been historically used for trade, fishing and oil industries. Due to the areas glacial history, the opening to these inlets boast crystalline sandy shores with Nairn winning awards for some of the best beaches in the UK.

The relatively flat terrain of the town as it slopes towards the coastline is in stark contrast to the hilltops to the south and those located on the Black Isle to the north west. The mountain ranges provide a level of protection from the rain making Nairn one of the driest places in the country with the fewest rainy days per annum.

Though the town is relatively small, it has a broad catchment area, as many schools in the Highlands do, to reach residents living in remote areas. The design for a new academy in Nairn will be responsive to the idyllic setting of the town, referencing its historic narratives, unique geological features, weather conditions and the social structures present in rural communities.

## Nairn Character

Moray floods, which wreaked havoc on the harbour, after which fisherman brought their families into the town and took up feus to erect houses in Park Street and Society Street.

For generations, fishing and farming were the two main industries in Nairn and the surrounding countryside. Today, however, the harbour basin is used mainly for pleasure craft, and technological advances in farming dramatically reduced the number of people working in the industry.

The opening of the Inverness and Nairn Railway in 1855 had an immediately beneficial effect on the town. Most of the major building development on the High Street can be traced from that date. With the opening of the railway station, the alleged medical properties of the local seawater and the county's good weather, Nairn became a respectable and popular holiday destination for the wealthy.

The town was thus transformed from a once thriving fishing community into a flourishing health resort. The expanse of award-winning sandy beaches, fantastic sea views and ample opportunities for riverside, forest and heritage walks mean that Nairn has remained a popular holiday destination ever since.

## Townscape

The picturesque seaside town nestles between the Monadhliath Mountains and the southern shores of the Moray Firth. The royal burgh is renowned for its low rainfall, high number of sunshine hours and less severe winter conditions, particularly for a town situated so far north.

Nairn, and the surrounding area, have been settled for many thousands of years; the area has witnessed the comings and goings of various peoples over the centuries.

The town likely grew as a huddle of dwellings at the top of the High Street Brae around the site of Constabulary Gardens, where the castle of Nairn once stood. The main development of the historic Fishertown dates from around the time of the 1829



# Nairn Academy | Community



## Lifelong Learning

Due to changes in the UK's demographics, including an aging population, there is a growing emphasis on ensuring access to education at every stage of life. Intergenerational learning has been shown to bring significant benefits to communities and society as a whole. Additionally, the use of new information and communication technologies opens up new possibilities for learning between generations.

Both younger and older generations can collaborate in both formal and informal learning settings, presenting opportunities for shared learning and knowledge exchange, within the new school complex. The design will explore ways to integrate these opportunities into our education systems so that all community members can benefit from lifelong learning.

## Community Participation

Prospects for lifelong learning can be found in the myriad of community, groups, societies, and clubs active in Nairn.

Among them, Green Hive - by Nairn River Enterprise - is a thriving and sustainable community hub and local charity supporting local people with a focus on environmental solutions. The hub delivers a wide range of activities, products and services which bring about "Happier People and Happier Places in Nairnshire" with an emphasis on community action to improve the environment. Another is the Nairn Men's Shed project, which aims to create positive views of aging and later life, tackle loneliness and isolation and help older citizens to be as well as they can be, socialising and carrying out a range of purposeful activities for the benefit of themselves or for their local community.

In the design process of the new education facility, there will be careful consideration of opportunities for collaboration and integration with these local groups. Ongoing discussions with teaching staff, community stakeholders, and other relevant parties will be instrumental in realizing the vision of sharing and collaboration within the new campus.







## Social Enterprise

Developing the Young Workforce (DYW) is the Scottish Government's strategy for youth employment, with the goal of better preparing young individuals for the workforce. DYW, which is driven by employers, collaborates with local businesses to offer opportunities for young people to enhance their employability skills. Their aim is to establish stronger connections between businesses and education systems, ultimately improving the readiness of young individuals for the world of work.

One significant regional challenge is the outmigration of young people who often leave their local areas for further education and job opportunities. DYW, in partnership with various organizations, is actively engaged in informing young people about the opportunities available to them locally, with the hope of encouraging them to choose to live and work in their own communities.



# Nairn Academy | Site Appraisal

-  Existing Building Footprints
-  Sports Pitch
-  Vehicular Access
-  Pedestrian Access
-  Pedestrian & Cycle Path
-  Sun Path

## Site Characteristics

The site of Nairn Academy is located remotely from the town centre just off the main road into Nairn from Inverness. One of the principle challenges of the brief will be in connecting the school to the remainder of the town by creating a 'destination' with community facilities. The site enjoys a large area of greenspace on level land with uninterrupted light along the extended southern edge.

The school sits within a low density area of housing and the sole vehicular access comes from a small, residential road to the eastern edge of the site. Careful consideration must be taken within the design to develop a robust access strategy for the new proposals. A large portion of the site is dedicated to parking, and the existing academy occupies an expansive portion of the site with a sprawling single storey building. The academy was recently extended with three modular buildings on the eastern side of the original building that house ASL and science classrooms.

A small sports pavilion is positioned centrally on the site with changing spaces, a High Life Highland reception area, and small office spaces to service the community sporting facilities. A 3G surface sports pitch lies adjacent to the sports pavilion that remains accessible to the public and linked to parking spaces necessary for users.

In its current state the site is top-loaded to the eastern edge and lacks permeability due to the residential roads and railway boundary. The design proposals will be required to address the issues of access directly in the design to improve transmission through the site.

The large site gives the team room to consider future expansion. The site has an accessible pedestrian route and greenspace which is well used by local residents as an informal parkland and dog walking area. The site strategy will aim to enhance this footpath, making reference to the Safer Routes to School strategy.

## Access & Transport

Existing vehicular and pedestrian access routes define clear points of entry to the east, west and north of the site. Design proposals will endeavour to maintain the existing primary vehicular route from Duncan Drive to the east.

The design will also make use of the existing roads and parking space where possible to save on additional works and costs that would not materially benefit the new school.





# Nairn Academy | Existing Site





# Nairn Academy | Masterplan

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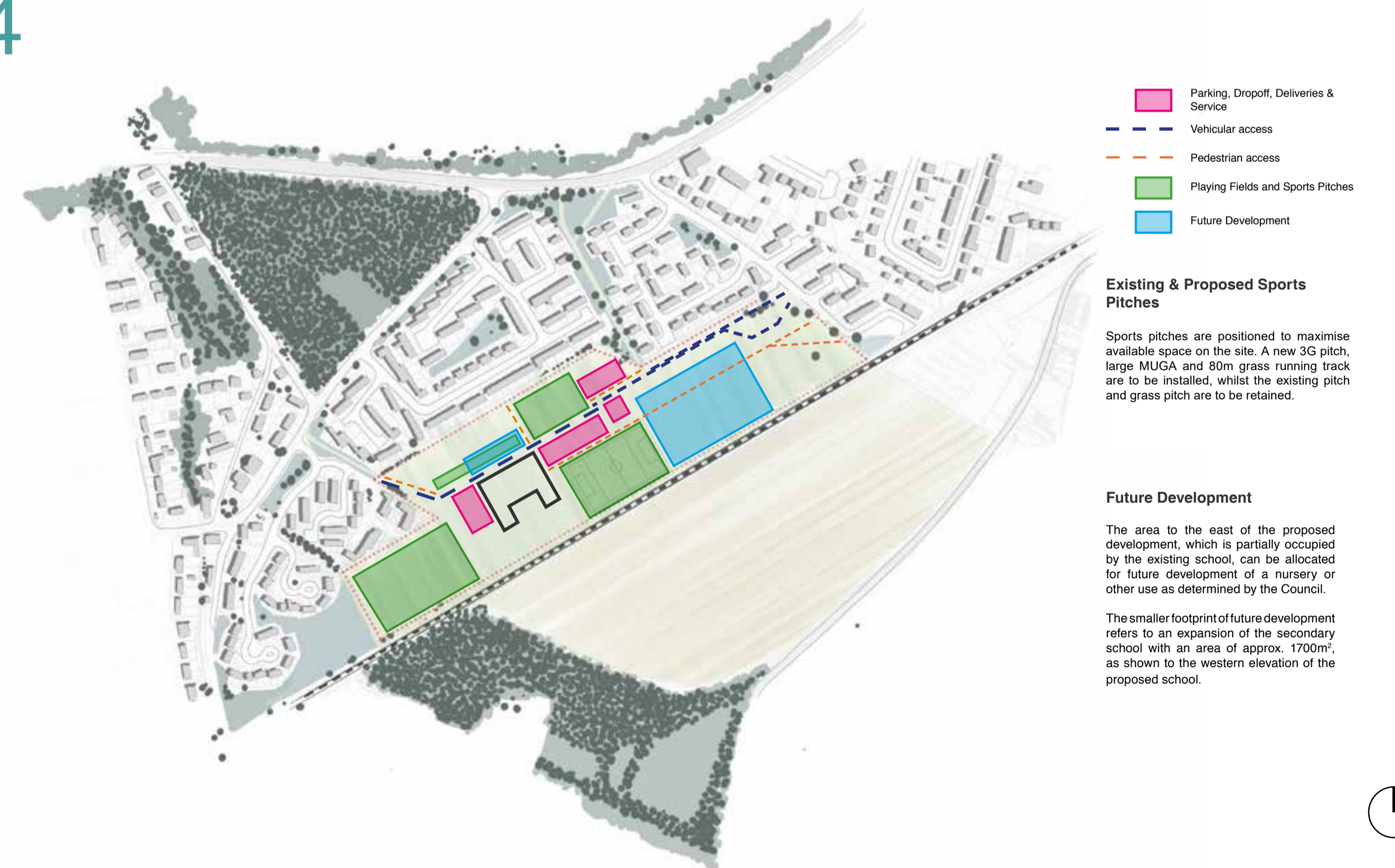
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# Nairn Academy | Design Principles

## Student Centred Learning

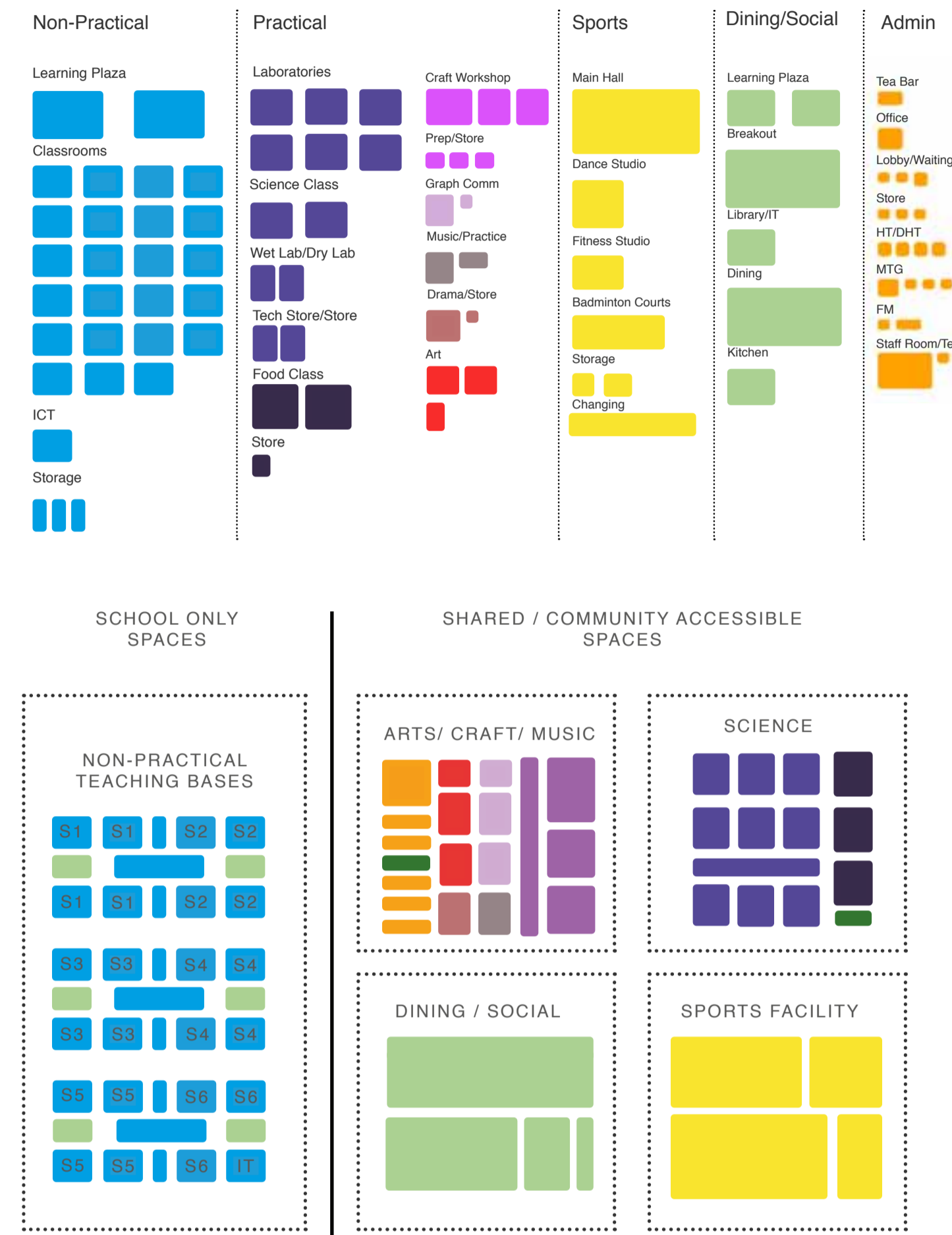
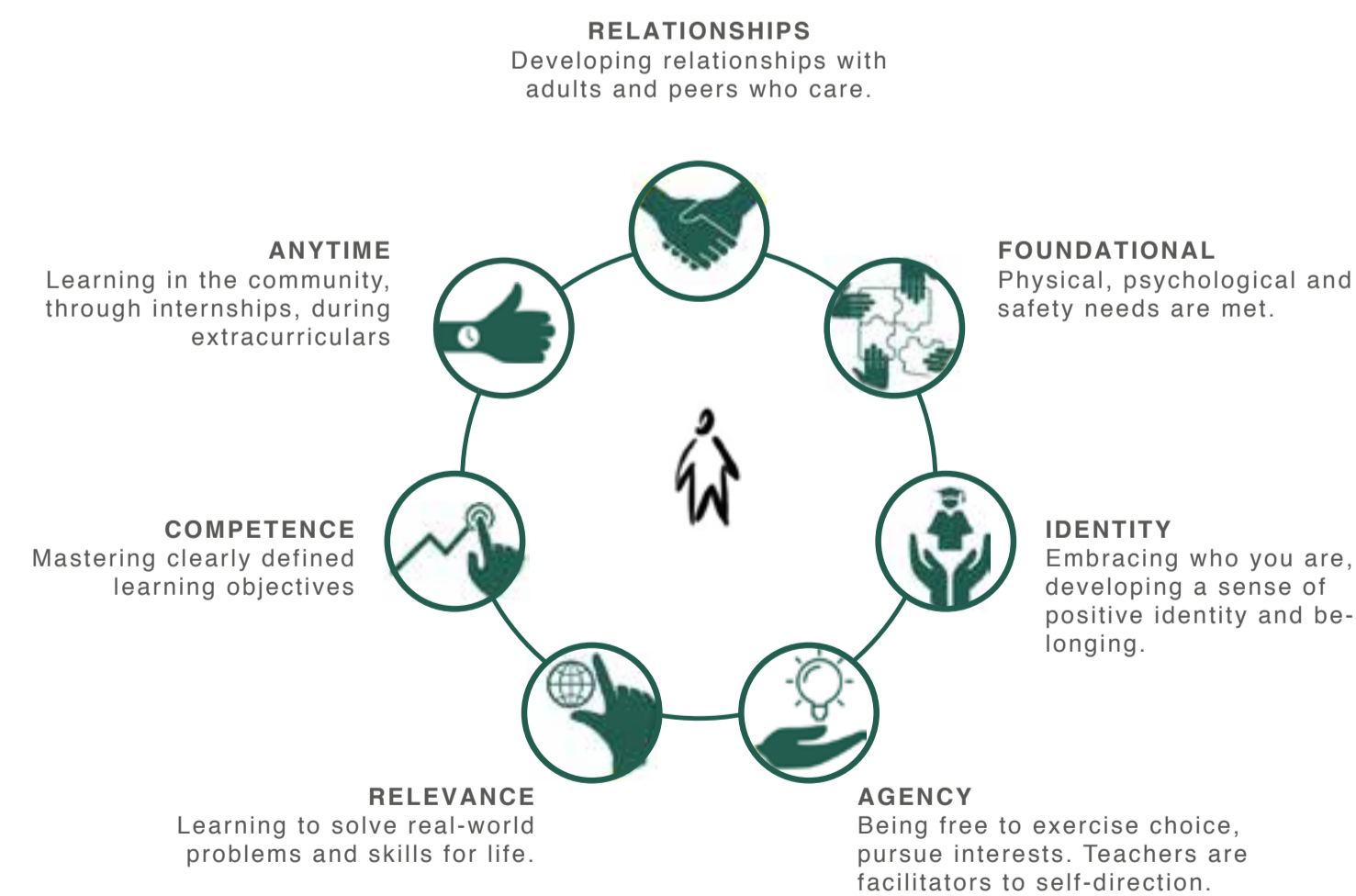
An aspiration embedded in the Curriculum for Excellence is the move towards student-centred learning. The design must support varied learning styles and the learning landscape beyond the classroom. This involves consideration of breakout and flexible use teaching spaces in the building; shared spaces such as dining areas; the external learning environment within the school grounds, and the wider context beyond.

Nursery and primary school classrooms are used to teach a variety of subjects in one space. The classrooms are curated each year to reflect the pupils work and personalise their environment. This model allows pupils to take ownership of their space and merge practical activities with the more academic.

The goal, therefore, is to consider how we bring these qualities into the secondary school model and how flexibility, collaboration and shared spaces might contribute to an overall learning landscape in the form of 'learning clusters'. For example, it may be desirable to create larger paired classrooms between similar age groups, certain classrooms could feature bespoke enhancements (such as generous smart screens, a scribble wall, or soft play spaces).

The introduction of a variety of differently sized spaces that suit different class sizes and ages can build user adaptability into the building's make-up. Support spaces for learning clusters can also be considered to play a role in user adaptability. Storage and FF&E can have a more flexible approach. Study, nurture and pupil support space can also be used as staff preparation spaces or meeting spaces.

Crucially, providing a variety of spaces in the school encourages a move away from 'behavioural based learning' that is teacher focused and modelled on the mono-functional classroom, to a more cognitive, 'experience driven learning' that responds to the environment and is centred on the student



## Outdoor Learning

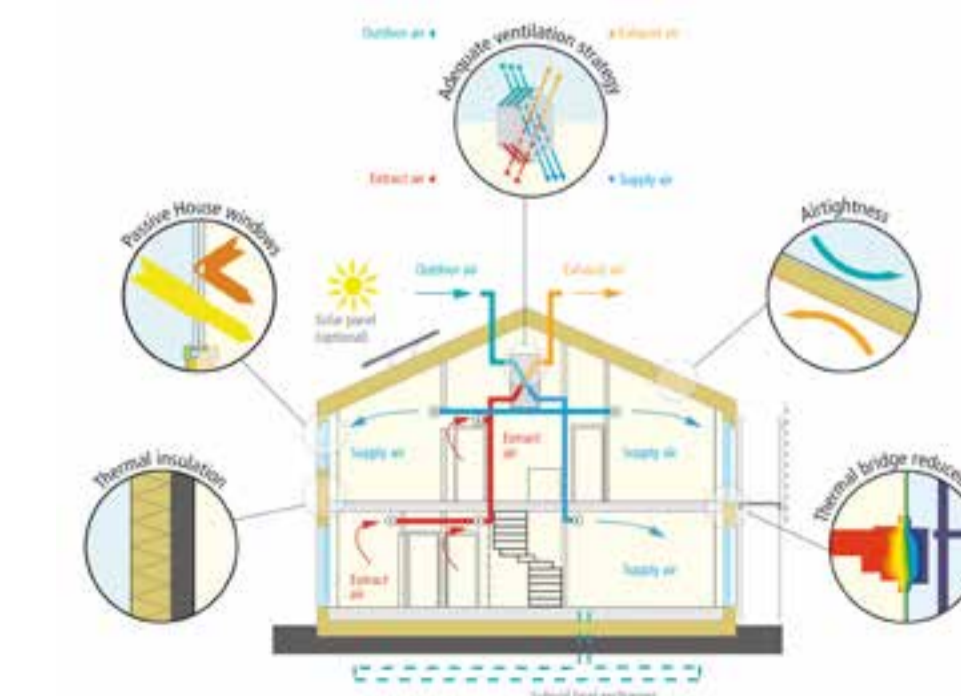
The value of outdoor space and the natural environment has been an area of increased focus that is considered a fundamental part of the learning experience and improves well-being. As such, the external spaces have been carefully considered to optimise these benefits. The design will seek to clearly define external spaces, making them closely connected to internal spaces.

Gardens and covered outdoor spaces will offer invaluable practical benefits, both relative to outdoor learning and recreation, as well as less tangible benefits such as improved user experience, with natural elements known to boost concentration and creativity.



## Sustainable Design

As Scotland works towards the 80% reduction in greenhouse gas emissions (compared to 2009 levels) by 2050 as defined in the Climate Change (Scotland) Act 2009, the Scottish Building Regulation carbon emission targets are becoming ever more onerous. In order to realise maximum carbon emissions savings for Nairn Academy at the lowest cost, it is essential to consider the passive benefits the size, shape and orientation of the potential building massing has on the demand for energy.



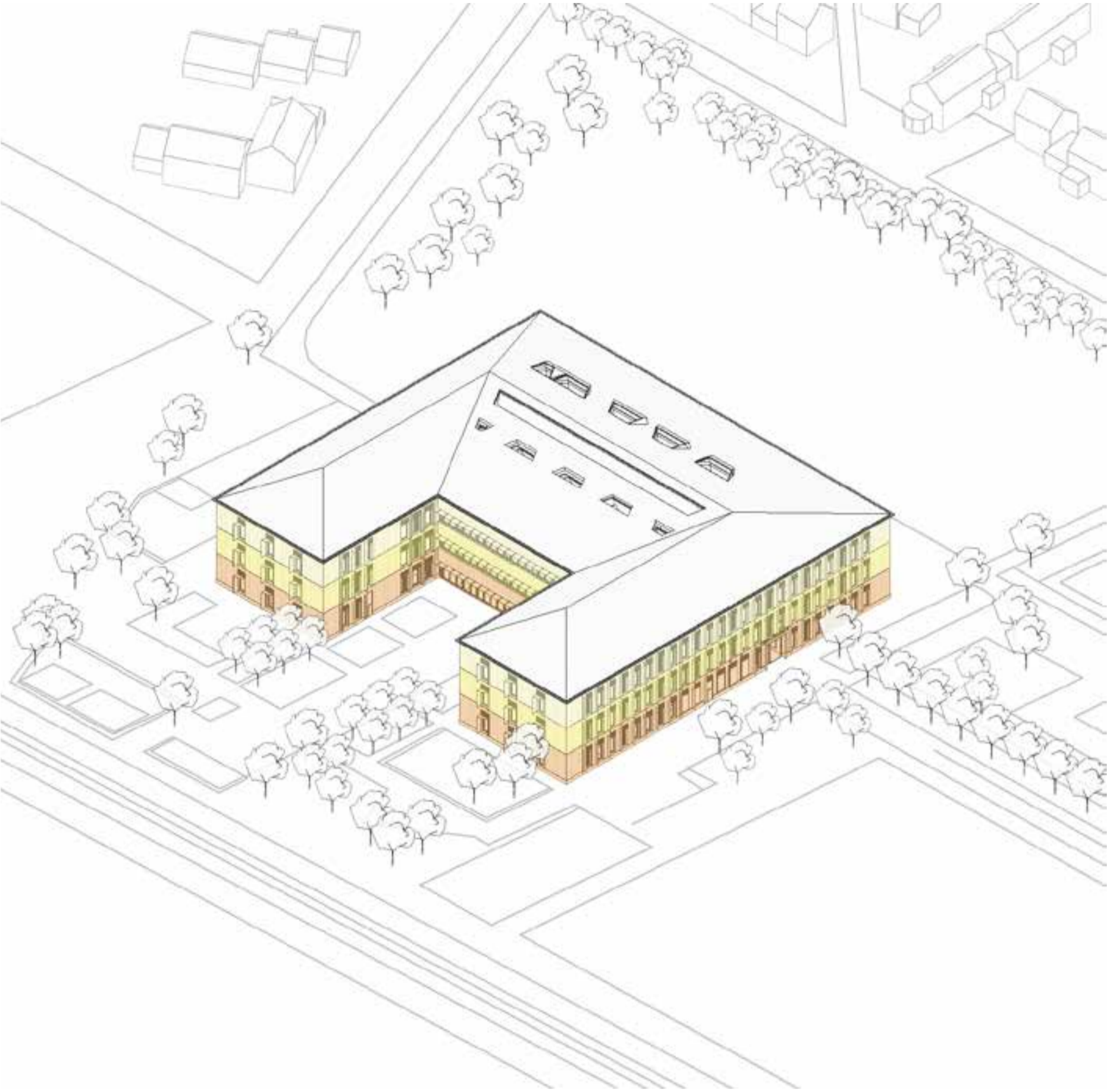


# Nairn Academy | Site Plan



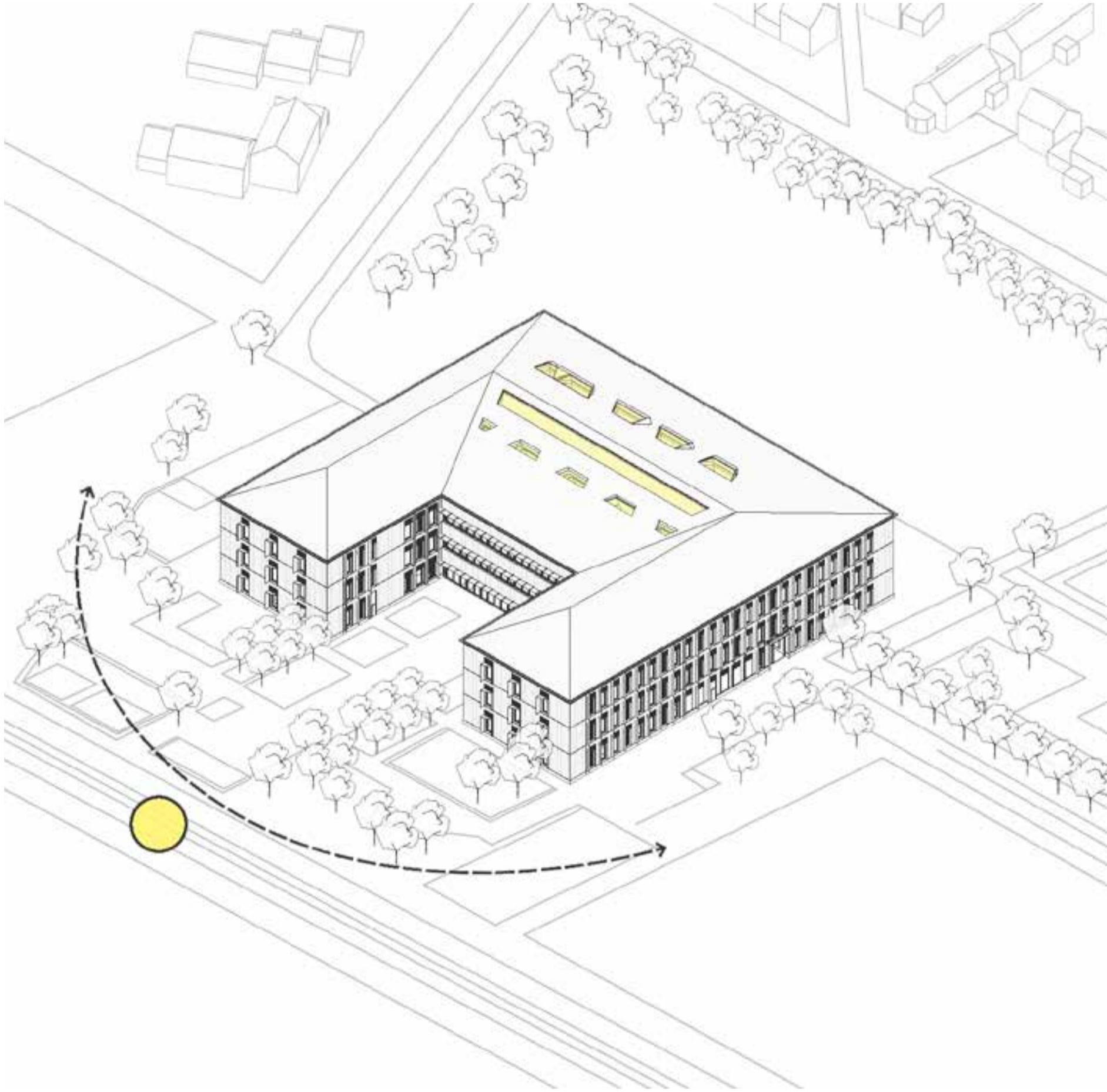


# Nairn Academy | Building Strategy - 3D Massing



## Building Volume

The building is split over three levels to ensure a smaller footprint, and more efficient perimeter to area ratio. At ground level, the programme is divided to feature mostly public functions and engage with the community outside of the school.



## Organisation

A long roof light sits above the central atrium allowing natural light into the middle of the building. The atrium, split across two floors, is described as the heart space of the building, hosting the dining space, cafe, learning resource centre, learning plaza and break out spaces. At the second floor, the roof light provides natural daylight to the interior classrooms.

The large double height sports spaces are located to the north of the atrium at ground floor, with science, SEBN and staff areas above. To the south of the atrium, and down each wing, are the practical classes at first and second floor. ASL is situated at ground floor within the east wing with direct access to secure gardens. Graphics and Craft & Design are within the west wing, again with direct access out to construction skills areas.



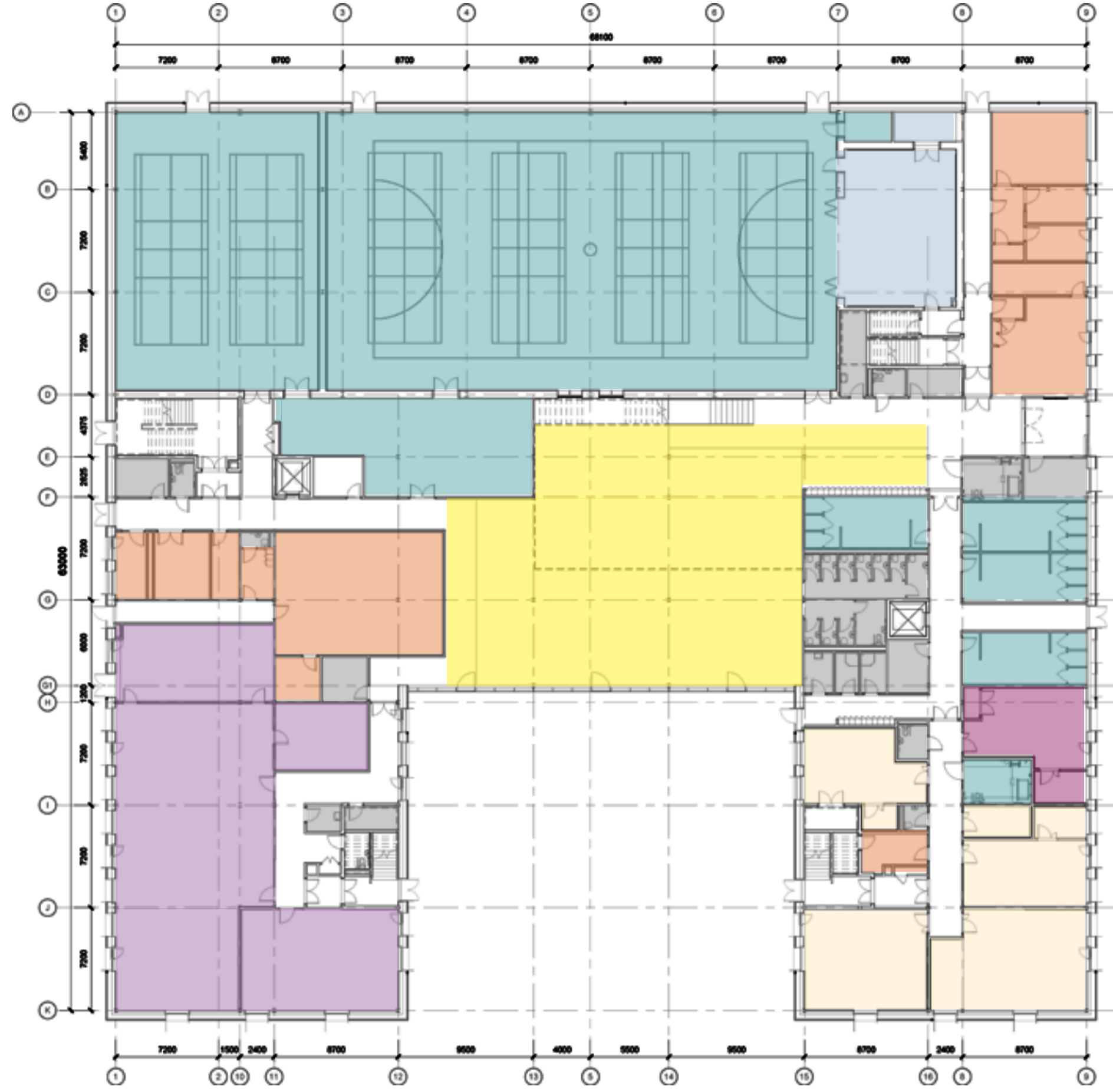
## Courtyard

The courtyard is south facing and protected by the two projecting ends of the building. The area is an outward projection of the dining space allowing for overspill space and outdoor seating. Beyond, the courtyard garden space is an area of covered external space, facing south and feeding out into the recreation space within the landscape.





# Nairn Academy | Floor Plans



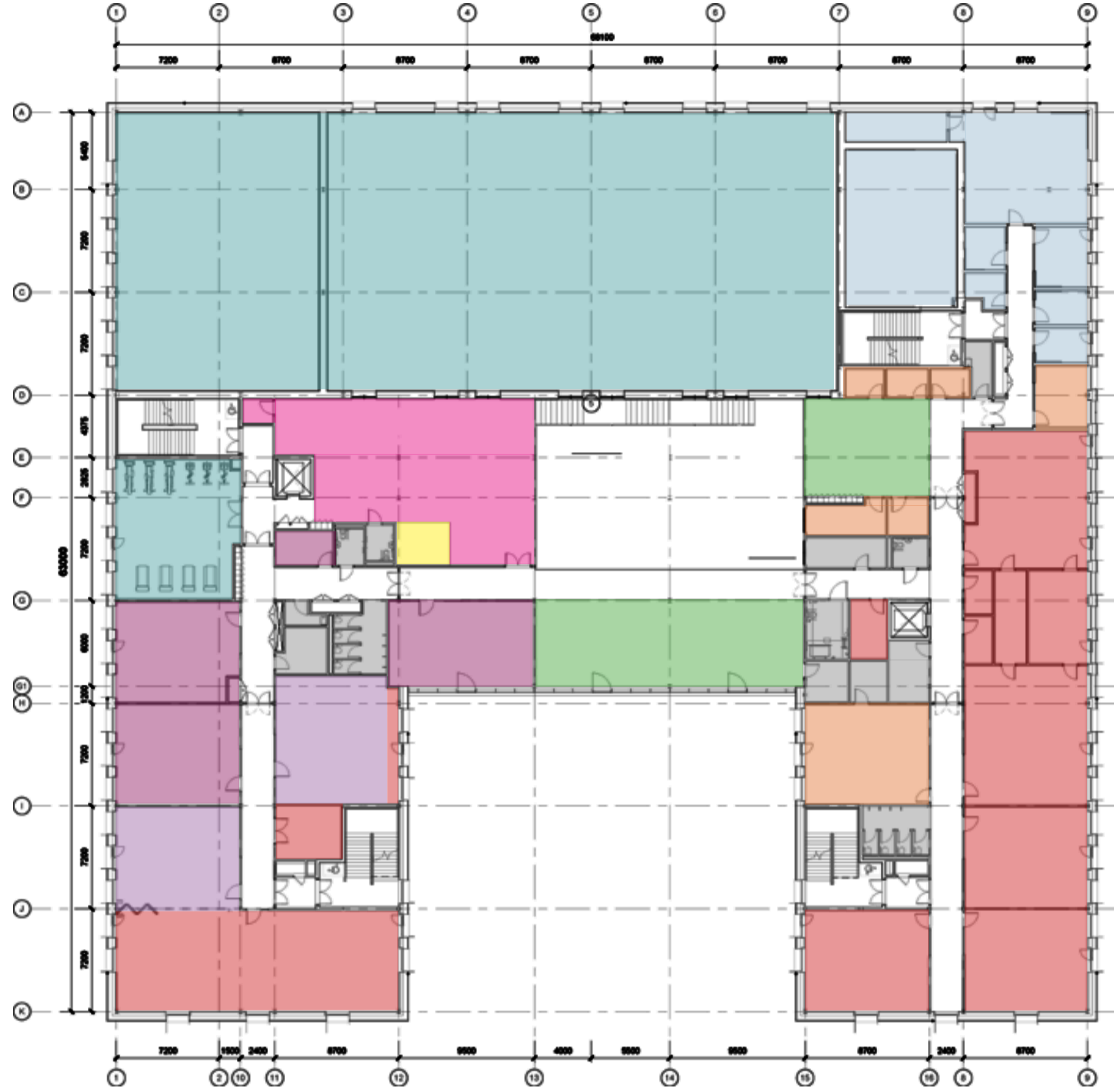
## Ground Floor

The ground floor is designed to accommodate most of the publicly accessible spaces within the building. The main sporting facilities, dining and reception areas are accessible to the community on this level. This floor also hosts ASL in the east wing, with direct access to secure gardens, and Craft & Design in the west wing, with direct access to external construction skills areas.

The Drama studio is directly off the main hall, allowing the space to become a performance area with spectator seating within the hall. Senior staff offices are located to the north east of the building, adjacent the general office and reception which faces onto the main entrance.

### Legend

- |  |  |
|--|--|
| <span style="color: #4DB6AC;">■</span> Sports Provision & Changing Facilities      | <span style="color: #9E9E9E;">■</span> Support / WCs / Services                    |
| <span style="color: #42A5F5;">■</span> Drama / Music                               | <span style="color: #4CAF50;">■</span> Learning Plaza / Breakout                   |
| <span style="color: #FFEB3B;">■</span> Dining / Cafe / Communal Areas              | <span style="color: #F44336;">■</span> Practical Classes                           |
| <span style="color: #E91E63;">■</span> Learning Resource Centre                    | <span style="color: #9575CD;">■</span> Languages, LSB, English, Maths & Humanities |
| <span style="color: #FF9800;">■</span> Admin / Offices / Staff Provision / Kitchen | <span style="color: #3949AB;">■</span> Science                                     |
| <span style="color: #FFCC80;">■</span> ASN   | <span style="color: #009688;">■</span> SEBN  |
| <span style="color: #E1BEE7;">■</span> CDT   |  |



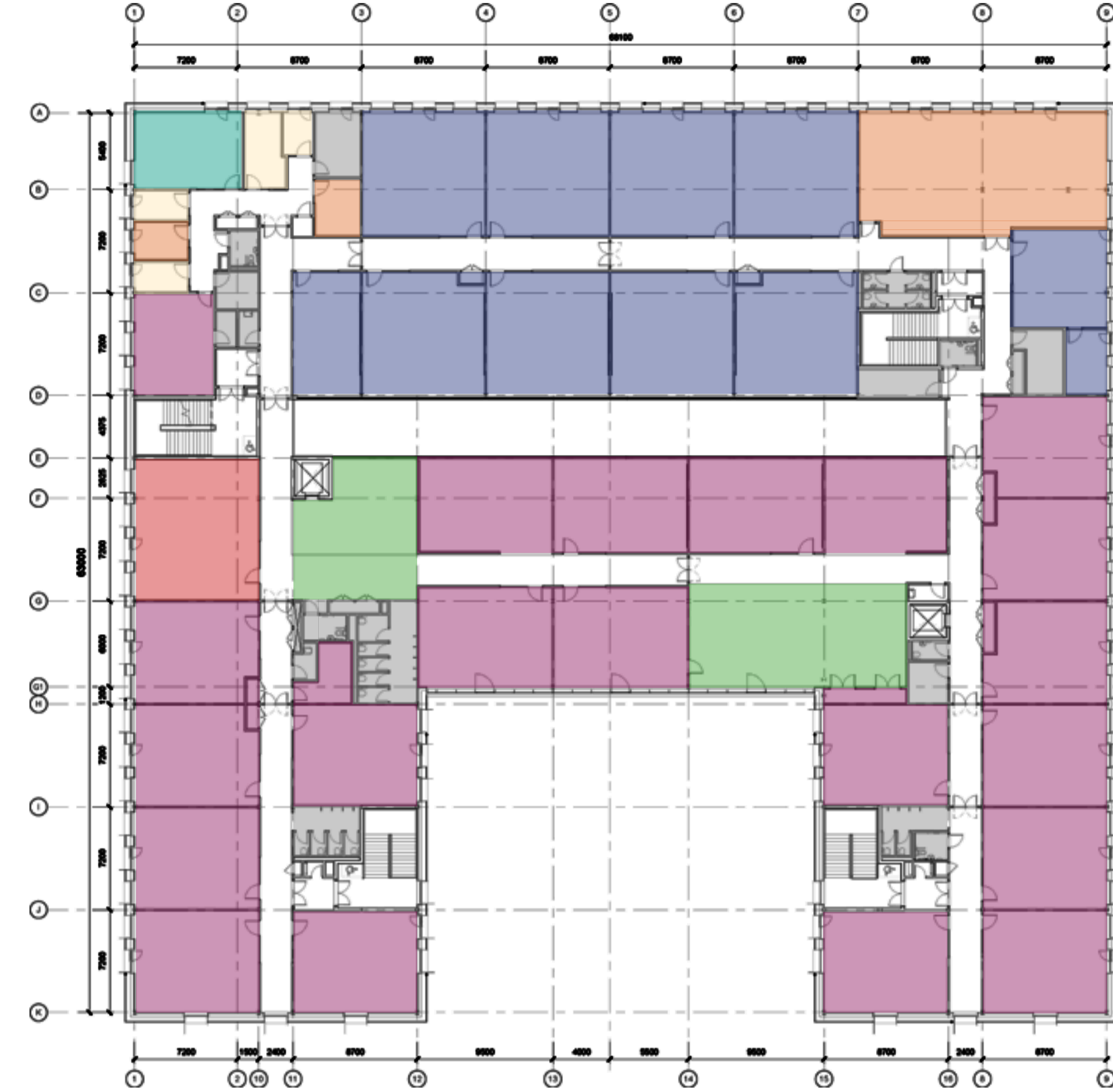
## First Floor

On the first floor, the focus is primarily on semi-public functions. Here, break out spaces, the Learning Resource Centre (LRC) and the open planned 'Learning Plaza' share the main atrium and offer views down to the dining spaces on the ground floor. The LRC and it's associated cafe are semi-public and are securely separated from the rest of the building. The fitness studio is also located within this secure zone.

Art and Graphic Design accommodate the majority of the west wing at this level, with practical classes and teaching kitchens in the east wing. Music is situated to the north east of the building, positioned above the drama studio.

The re-design of the project has focused on the proportions of the classrooms; ensuring generous amounts of daylight within the teaching spaces and attempting to regularise the plan onto an efficient grid.

The classrooms form the basic 'DNA' of the building with the optimum depth for daylighting resulting in a 7.2m wide grid along the principal facades. These classroom 'bays' are divided by three large windows spaced at 2.4m centres to give a regularised arrangement - 1600mm wide windows separated by 800mm cladding bays. The vertical proportions of the facade continue the use of the 800mm module with an 800mm deep louvre panel above each window and an 800mm cladding panel below each window. This results in a classically proportioned facade that maximises the use of natural daylight.



## Second Floor

The second floor of the building is the most private level of the building and not expected to be accessed by the public regularly. This level is dedicated to the non-practical teaching spaces to the south of the main roof light and along each wing. Science, SEBN and staff areas are located to the north of the main roof light.

The re-designed solar control system has resulted in the removal of the elaborate 'second-skin' solar shading of the previous design, to be replaced by a simple strategy of coloured aluminium shading fins running up the south reveal of each window. While protecting the building from glare and over-heating, this approach has also created the opportunity to provide a series of elevations that alter in shade and tone as you progress around the building.

The building now orientates itself around a more generous central courtyard. The courtyard layout suggests a classical villa garden with it's strong central axis providing a clear and symmetrical layout, complementing the classically proportioned facades.



# Nairn Academy | Interior Visualisations



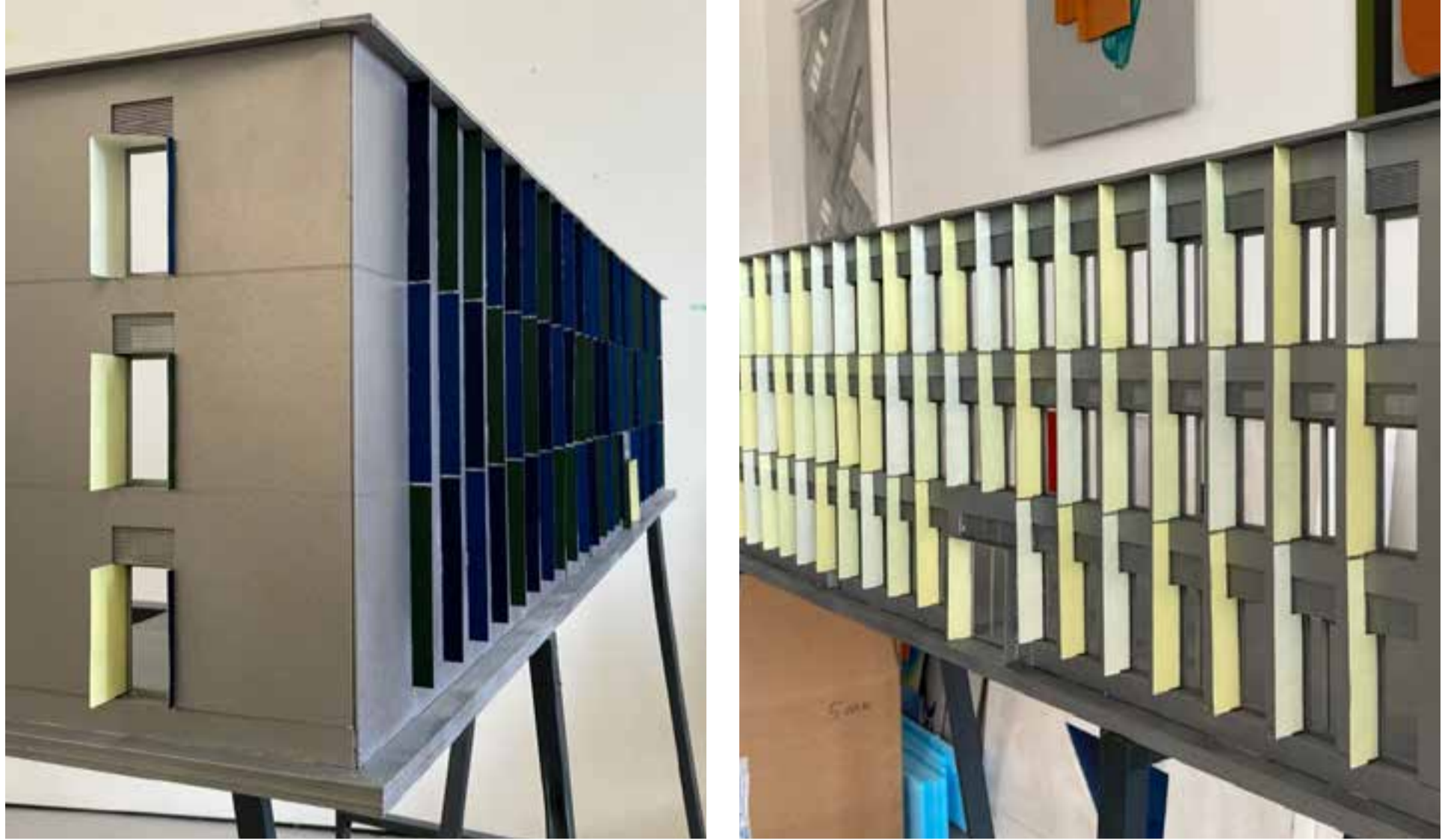


# Nairn Academy | Elevations





# Nairn Academy | Elevation Colour Treatment



**Toby Paterson**



The objective of the colour strategy for Nairn High School is to develop an approach to architectural colour that goes beyond decoration and supports the functional aspects of Reich and Hall's design while reinforcing its compositional qualities. This integrated approach aims to underpin the principals of the architectural design rather than simply adorning it.

To achieve this a dual colour palette is proposed with one part relating to areas where it is beneficial to shade glazing from direct sunlight and the other performing a reflective function in relation to indirect north light. The former (generally south facing) planes of the relevant fins/brise soleil are proposed as a dark toned red/green/blue range which read predominantly tonally dark but vary in hue while the latter (generally north facing) planes are in a series of pale yellows which read as the same hue with nuanced only tonal variation.

This approach firmly orientates the building in terms of how applied colour is used, introducing light, warm colour as the building is viewed from the north and stronger vertical accents when viewed from the south, these aim to strengthen the architectural image in what is a fairly horizontally orientated surrounding context. Within each colour group, tonal or hue shifts between individual fin elements are randomised in a way that consciously avoids a repeat pattern yet retains rhythm and variation that aims to subtly animate the rigorous grids of the facade.

At this stage it is foreseen that PVDF coating may be a good solution to colour application for individual aluminium fin/brise soleil elements, this entailing a different colour on each side with natural aluminium expressing the 6mm/8mm thickness of the component. It's currently proposed that the south facing vertical planes of window recesses also remain natural aluminium in colour (see SE corner isometric). The south elevation overlooking the courtyard offers an opportunity to explore this rationale further in a way that may also have landscape design implications, this aspect of the strategy remaining to be explored further in following development phases.