
School renewal
by refurbishment
a good practice guide

Architecture &
Design Scotland
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REMADE LEARNING PLACES

EXAMPLE 6

**CO-LOCATED SUBURBAN PRIMARY
SCHOOLS INTO LISTED BUILDING**
GREENHILL PRIMARY SCHOOL &
DRUMPARK ASN PRIMARY SCHOOL



INTRODUCTION

These examples of refurbishment support the ‘Why Refurbish?’ guide published by A&DS. The purpose is to show how local authorities approached different scales and types of school refurbishment projects across Scotland. A summary of learning points are set out in each example which reference the 9 principles of ‘Building Better Schools; Investing in Scotland’s Future’.

Examples:

- 1 Notre Dame Primary School
Listed urban primary school
- 2 Castlepark Primary School & Nursery
Suburban primary school
- 3 Coltness High School
Mid 20th century suburban high school
- 4 Halyrude Primary School
Rural primary school
- 5 Bent Primary School
Rural primary school
- 6 Greenhill Primary School & Drumpark ASN Primary School
Co-located suburban primary schools into listed building

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“Innovative and practical re-use of an educational asset for the co-location of two schools. Refurbishment has created renewed learning spaces that suit a broad range of needs, including ASN and community uses.”

EXAMPLE 6

CO-LOCATED SUBURBAN PRIMARY SCHOOLS INTO LISTED BUILDING

Greenhill Primary School &
Drumpark ASN Primary School
Coatbridge, North Lanarkshire

Size	350 pupils
Type	Refurbishment and extension
Client	North Lanarkshire Council Education Services
Design and management	CRGP Architects North Lanarkshire Council
Contractor	Graham Construction
Programme	December 2010 – August 2012



A carefully thought through and well implemented co-location of a nursery, primary school and ASN primary school into the former Coatbridge High School in North Lanarkshire.

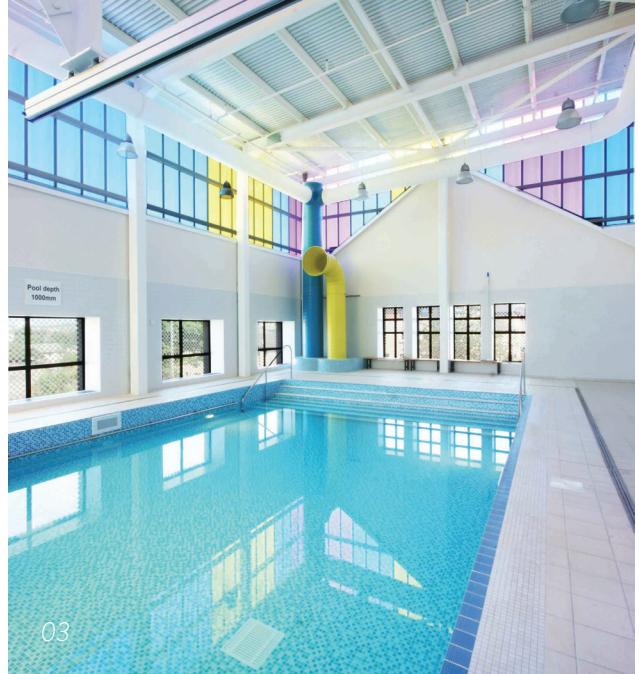
ASN therapy facilities, new entrances and improved site access and play areas are all created by a sensitive refurbishment that also has key new build elements added such as a new shared entrance and a whole school social space. This school co-location creates a single stream mainstream primary with the potential of 210 places, an ASN primary with 100 places and an associated 'language and communication' nursery with 10 places.

The existing schools and nursery were kept fully open at their previous locations during the works allowing the construction to proceed without requiring complex phasing and decant into temporary classrooms.

02. CLIENT

Briefing and procurement management were led by officers from the local authority team and consisted of educationalists, asset managers and experienced school renewal officers. The authority uses a well-defined design vision and approach for all school renewal projects. The school staff and community were both consulted during the development process and this helped build support for the refurbishment approach.

For this tranche of renewal work the authority ran a mini competition to select contractors based on the use of an exemplar design. Design consultancy was procured using a framework of suppliers.



Top right: New training pool into refurbished and remodelled space.

Above right: New build shared school entrance and administration.

Right: Flexible learning space accommodated into a refurbished atrium.

Bottom right: New build whole school social space in-filled into a previously open courtyard space.

03. BACKGROUND

07

Greenhill Primary School and Drumpark ASN Primary School were identified as requiring redevelopment under Phase 2 of the NLC ‘Schools and Centres 21’ programme. In line with good practice, North Lanarkshire Council requires individual buildings to meet the needs and expectations of end users to the greatest possible extent whilst concurrently enhancing the wider community in their location.

Estate management issues at the existing sites of Drumpark & Greenhill Schools indicated that poor property and learning conditions existed in both locations. The combined pupil rolls from both these facilities would require a significant site area, and option appraisal was undertaken to find a suitable site.

The appraisal identified the Coatbridge site as meeting the site area needs to accommodate sufficient numbers of learners and the required external play areas.

Above: The high school buildings had laid empty for several years and the site had been filled with accommodation beyond its capacity. The original parts of the building were held in high esteem by the community, re-use was a well supported option.

Next page: Redundant non listed buildings were demolished to create space for new open play areas and parts of the existing building were remodelled to accommodate ASN functions. The new build pool sits at the corner of the site and uses contrasting modern materials to express its presence.



Briefing and policy drivers

North Lanarkshire Council's brief was to provide renewed learning facilities through co-location of the two schools. Co-location was seen as bringing economies through the possibility of sharing key administration and whole school spaces. The two schools had differing learner needs and this required a detailed brief containing specific ASN learning spaces, language and communication assessment spaces (ASN nursery), primary education spaces; together with all required service and administration areas. Planning policy and the local development plan drove issues relating to use category and place which helped inform the choice of Coatbridge as the preferred location.

A planning case favouring the re-establishment of educational use at Coatbridge was also successfully argued.

New build vs refurbishment

In order to fully test the fit of this multi-purpose brief, a detailed feasibility study was undertaken. The business case was established through North Lanarkshire council developing two exemplar schemes – one for a new build facility on the site, and the other proposing demolition of redundant parts of the school, refurbishment of the Grade C listed sandstone building, and the addition of new build extensions. Both options were costed to establish the most economical approach. The approach chosen was to undertake a refurbishment and extension of the existing building, and to demolish the redundant and non-usable parts of the school to create space for new additions.



04.

APPROACH

Thorough briefing and detailed property assessment at pre-design stages informed the approach to the redevelopment and helped ensure a well established budget and business case. The use of an exemplar scheme helped set out the detailed design requirements to ensure that tendering of the works could go forward with a high level of certainty as to the operational needs, building and structural condition and likely risks and associated costs.

The master plan for the school development was based on a strategy to ease construction phasing, and gain respective cost efficiencies as a result. Simple extensions are added to the front of the site and infill space between the existing building wings to create a covered flexible space. The site falls and level changes were also an influencing factor informing the site plan and the internal arrangement of the school. ASN spaces and the assessment nursery are located at Ground floor level with the non-ASN spaces located at first floor level. ASN spaces were located with the correct adjacencies to outdoor learning areas. A new single story shared school entrance is located to create a strong relationship with the street and a civic presence for the schools. Shell space has also been created as part of the works to allow for future expansion or use either as community or Local Authority officer accommodation. The cost plan and budget allowed for this, and the longer term view of capital expenditure creates value over the life cycle of the facility.

A decision was taken to allow the new additions to contrast with the original parts of the building fabric and this design strategy was worked up with full involvement of Historic Scotland. The quality of the existing landmark sandstone building was not detracted by the additions of the new elements. New uses were accommodated within the old walls to allow for a fully updated learning facility. The new forms touch the solid structure lightly, and this helped greatly with construction detailing and project phasing.

Repair, retention of original features, re-use of major building elements and the replacement of redundant parts of the former school all took place.

Key design drivers

- Re-establish educational use on the site by creating fully renewed learning spaces
- Implement long term view on asset management to promote building re-use in order to increase sustainable practice and meet community needs
- School co-location and site rationalisation in response to property issues, and to create space efficiencies through shared use
- Accommodate ASN requirements alongside nursery and non-ASN learners within the community rather than in a remote location
- Improve access, operational performance, and energy efficiency to bring facilities management improvements
- Up-keep the needs of a listed building to protect its special interest whilst allowing adaption and re-use
- Accommodate sufficient play space on site and to significantly improve the outdoor sports spaces



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Meeting the needs

- Project establishment in direct response to policy needs within the local plan and careful assessment at pre-design stages, ensured re-use of the listed school. This allowed the redundant out-of-use asset to be put back into use within the community
- A design strategy and approach was created to allow effective co-location of two schools. Careful briefing through consultation and good practice property assessment was required to achieve this. Sufficient time and resource were allocated for undertaking this assessment, allowing for thorough consultation and brief management to formulate the most effective design approach
- A logical and efficient use of space allowed site rationalisation. This supported the removal of non-listed unusable parts of the previous school, and in turn freed up site area for new elements and outdoor learning spaces. Rationalisation also allowed for improved site access and created a large space for outdoor learning and play activities for the whole school
- Fully fitted out ASN spaces include training swimming pool for ten pupils, occupational therapy rooms, sensory rooms, and soft play. Non-ASN learning spaces have all been fully updated and fitted out to contemporary standards
- Sensitive re-ordering of the internal environment within the original sandstone building was undertaken, based on a careful functional and operational assessment, to convert the existing high school into a co-located primary school.
- Sports, general purpose and hall spaces have been sized, located and fully fitted out to allow community use
- A contractor with high level of experience of refurbishment was used to deliver the project. The contractor brought value through risk assignment, costing and specialised work planning involving specialist labour

05. REORGANISING AND CREATING SPACE

Inside

Demolishing redundant earlier additions freed up site space which was used to rationalise access and also for operational requirements and new additions.

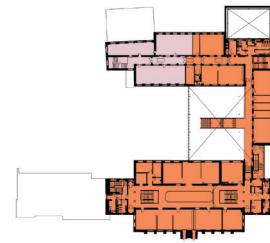
Functional space within the listed building footprint was re-assigned and/or relocated. This was driven by careful consideration of the brief, requiring functional, operational and fit-out improvements.

Space and location strategies for functions within the listed building were directly linked to careful management of the brief, and were established at the project feasibility and early design stages. The brief asked that the specific needs of the ASN learners be met and specialist services such as physiotherapy, swimming and speech therapy are accommodated. Curriculum for Excellence spaces were also created along with general purpose teaching areas. A flexible whole school space was added by infilling the open courtyard of the former high school. New build spaces were shaped and sized as simple new additions to accommodate spaces that could not be housed within the listed building either as a result of suitability and fit, or as a result of internal re-organisation of space within the listed building.

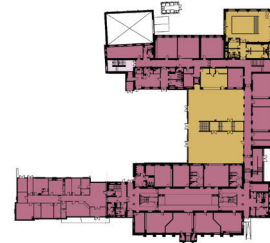


Good adjacencies were created and the layout ensures rooms relating to the internal courtyard space are positioned around the courtyard, such as the kitchen, stage/ drama, AV room, changing facilities and noisy rooms such as the music room.

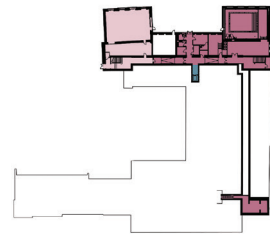
The building is accessible for all, particularly on the ground floor where Drumpark ASN Primary School is based. The change in level across the site of more than 8m presented a challenge with regards to accessibility and ease of movement. The building layout deals with this in such a way that ramps are kept to a minimum and creates an interesting play area.



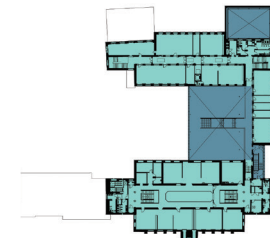
Level 02



Level 01



Level 00



- Existing building
– remodelled and refurbished
- New build
- Site boundary
- Outline of demolished buildings
- Future expansions space
– part refurbished
- Drumpark ASN School
- Greenhill Primary School
- Shared Space



06.

LEARNING POINTS

Example	Greenhill Primary School & Drumpark ASN Primary School, Coatbridge
Scale	Major refurbishment and extension
Type	19th century listed high school
Context	Town centre
Priorities	<ul style="list-style-type: none"> • Town centre regeneration • Community attachment to the existing building • Co-location of services in support of social inclusion for ASN learners • Gaining savings through efficient use of education estate assets and by managing and co-locating services
Key lessons and alignment with Scottish Government 9 Principles for School Renewal	<p>Principle 2: Innovative design and change should be informed by experience</p> <ul style="list-style-type: none"> • Collaboration between asset and educational officers has been used to support vision and briefing for learning. The collaboration also helped support the development and inclusion of a reference design and a new build comparator. Both helped justify the investment • Consult widely and within the host community and cohort on issues relating to use, outreach and the improvements that the project will bring. There was strong sense within the Coatbridge community that the school buildings should be reused. Incorporate community spaces that support and bolster the outreach of the school facility, visible, accessible and easy to manage out of hours <p>Principle 4: Schools must be in a condition to support and enhance their functions</p> <ul style="list-style-type: none"> • Detailed property survey information helped establish a detailed budget early on in the project process and also fed directly into the design brief for change

cont.

Key lessons

and alignment with
Scottish Government
9 Principles for
School Renewal

Principle 5: Schools must be more suitable and inclusive, better future proofed for flexibility and adaptability

- A clearly informed educational brief can be matched to an historic setting and can support the co-location of ASN and non-ASN learners
- Use careful assessment processes to identify under-utilised space, and plug in new uses to create greater operational and functional efficiencies. At Coatbridge this helped make space for new build additions and play spaces
- Work with the logic of the existing building in terms of grids, cores and key spaces. Analyse carefully and locate functions in spaces and areas best suited to meet the learning and operational requirements
- Be economical in how and where additions are added. Group and pack new spaces efficiently: appreciate verticality but organise spaces with a mind to access requirements and play space drivers



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Image credits

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07–09	GRGP Architects
10–11	Martin McAleer
12–13	Architecture & Design Scotland
14–15	Martin McAleer

APPENDICES

The following documents are a useful resource supporting the ideas, themes and arguments contained within this guide:

School Estate Management Plans Building Our Future:
Scotland's School Estate
[www.scotland.gov.uk/
Publications/2003/08/18009/25296](http://www.scotland.gov.uk/Publications/2003/08/18009/25296)

Building Excellence – Exploring the implications
of Curriculum for Excellence for school buildings
[www.gov.scot/Topics/Education/Schools/Buildings/
Excellence](http://www.gov.scot/Topics/Education/Schools/Buildings/Excellence)

Senses of Place: Building Excellence
www.ads.org.uk/smarterplaces

Better Briefing For Education Benefit
[www.ads.org.uk/smarterplaces/features/better-
briefing-for-education-benefit-transforming-spaces-
to-inspire](http://www.ads.org.uk/smarterplaces/features/better-briefing-for-education-benefit-transforming-spaces-to-inspire)

The Re-design Option
[www.ads.org.uk/smarterplaces/news/the-re-design-
option-exhibition](http://www.ads.org.uk/smarterplaces/news/the-re-design-option-exhibition)

Sustainability in Reuse
[www.ads.org.uk/designforum/qualityofplace/highlight-
sustainability-in-re-use?typology_id=6&quality_id=4](http://www.ads.org.uk/designforum/qualityofplace/highlight-sustainability-in-re-use?typology_id=6&quality_id=4)

Managing the Brief For Better Design
www.routledge.com/books/details/9780415460316/

How Buildings Learn: What Happens After They're Built
Brand, S, Penguin Books, 1995 OECD

Centre for Educational Research and Innovation
(CERI) – Schooling for Tomorrow
[www.oecd.org/edu/ceri/centreforeducationalresearchan
dinnovationceri-schoolingfortomorrow.htm](http://www.oecd.org/edu/ceri/centreforeducationalresearchandinnovationceri-schoolingfortomorrow.htm)

Modernising School Buildings in Portugal
[www.oecd.org/education/innovation-education/
centreforeffectivelearningenvironmentscele/49567409.
pdf](http://www.oecd.org/education/innovation-education/centreforeffectivelearningenvironmentscele/49567409.pdf)

SFT Lessons Learnt
[www.scottishfuturestrust.org.uk/publications/lessons-
learnt/](http://www.scottishfuturestrust.org.uk/publications/lessons-learnt/)

SFT Schools Development Handbook
[www.scottishfuturestrust.org.uk/our-work/sft-build/
schools-for-the-future/schools-development-handbook/](http://www.scottishfuturestrust.org.uk/our-work/sft-build/schools-for-the-future/schools-development-handbook/)

