

**AGENDA ITEM NO:** 

**EAST DUNBARTONSHIRE** 

COUNCIL

**22 SEPTEMBER 2022** 

PNCA/077/22/AB DEPUTE CHIEF EXECUTIVE

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SUBJECT TITLE PROPOSED NEW LENZIE ACADEMY – OUTCOME

OF FEASIBILITY STUDY

This Report is not for publication prior to the meeting because it contains exempt information or there is a likelihood of disclosures during the meeting of the exempt information as defined in Paragraph 6 and 9 of Part 1 of Schedule 7A of the Local Government (Scotland) Act 1973, as amended, and the press and public are likely to be excluded from the meeting.

## 1.0 PURPOSE

1.1 The purpose of this Report is to provide Members with the results of the feasibility study to develop a new Lenzie Academy, including details of all options, indicative construction costs and timescales for delivery.

## 2.0 RECOMMENDATIONS

It is recommended that Council:-

- **2.1** notes the costs and programme associated with the delivery of each option;
- 2.2 approves option 3 as the preferred option, recognising that affordability of the project is subject to securing external funding;
- 2.3 instructs officers to commence stakeholder engagement with the school community to support the submission of a Learning Estates Investment Programme (LEIP) funding application to the Scottish Government; and
- 2.4 authorises officers to submit a LEIP funding application upon conclusion of stakeholder engagement to support the delivery of the project, and to report on the outcome of the LEIP application once determined.

ANN DAVIE
DEPUTE CHIEF EXECUTIVE

## 3.0 BACKGROUND/MAIN ISSUES

- 3.1 On 25<sup>th</sup> February 2021, Council instructed officers to progress a feasibility study into the development of a new secondary school to replace the existing Lenzie Academy. The project brief was to focus on costs and opportunities for co-location with other services; an assessment of all potential site options (including the existing site) and consideration to be given to adopting a Passivhaus approach to the design of the new school (Ref: PNCA/020/021/AB).
- 3.2 In February 2022, Council provided further approval for an in-principle commitment of £80m in funding for a new Lenzie Academy and associated community and early year facilities, subject to securing of external funding to support the project, instructed Officers to continue the feasibility and outline design work, and to provide a Report to Council upon conclusion of that work in advance of stakeholder consultation (REF: PNCA/17/22/AB). A budget of £3m was included in the capital programme in year 1 to support the completion of the feasibility study; design work to support stakeholder engagement; and to facilitate a technical submission to the Scottish Government's LEIP fund. In addition, a balancing sum of £77m was provisionally included within the programme in years 4, 5 and 6 to deliver the new facility. It is important to note that this sum remains a provisional allocation as the project is not viable without securing external funding to support its delivery. It is also important to note that it is unlikely that any of the options detailed within this Report can be delivered within the £80m budget and that additional funding would require to be allocated to deliver the project.
- 3.3 A detailed project brief was subsequently developed by officers, based on a 1400 pupil school and using the on-going Boclair Academy project as a basis for the accommodation requirements and adjacencies for the design of the new school. Enhanced in-use energy performance requirements for the new school, providing the opportunity for a future submission to the Scottish Government Learning Estate Investment Programme (LEIP), were also identified as a key requirement for the project, in addition to assessing the embodied carbon implications for each option.
- 3.4 Using the agreed design principles for Boclair Academy, the total required site area for a modern equivalent new-build school, including school buildings, car parking, sports pitches and external areas was calculated and used to set the minimum qualifying area requirement for potential development sites. The total internal building area required for the development is approximately 14,000m2.
- 3.5 McLaughlin and Harvey Ltd were appointed via the Scape Framework to lead a detailed feasibility study for the project on behalf of the Council. As the main contractor for the on-going Boclair Academy project, the team have had the opportunity to draw on their experiences of the project to date to inform both the design and cost planning for the Lenzie Academy project. An experienced consultant design team including architect, civil and structural engineers and mechanical and electrical engineers were also appointed to support the project, alongside an independent cost advisor.
- 3.6 Four potential development sites for constructing a new school have been shortlisted. These are the only suitable sites located within the current catchment area for Lenzie Academy. The shortlisted sites are as follows:
  - The existing school site at Myrtle Avenue, Lenzie;
  - Whitegates Playing Fields, off Initiative Road, Lenzie;
  - Boghead Playing Fields, Boghead Road, Lenzie;
  - Lenzie Rugby Football Club, Viewfield Avenue, Lenzie;

In addition to the 4 new build sites listed above, the refurbishment and extension of the existing school building at Myrtle Avenue has also been shortlisted as an option. This has been included for completeness following a recent change in the LEIP assessment criteria which now requires submissions to detail the level of embodied carbon attributable to a proposal in addition to operational carbon emissions.

Furthermore, a number of options have been developed which could deliver a new school via a campus model across 2 of the sites detailed above; the Lenzie Rugby Football Club site and the existing Lenzie Academy site.

- 3.7 The feasibility stage of the project involved the development of architectural site layouts for each option, which were used as the basis for initial stakeholder consultation with internal colleagues. This included Education, Planning and technical services such as Sustainability, Streetscene, Environmental Health, Waste, Roads, Drainage, Transport, Estates, ICT and Facilities Management, before being further refined for assessment by the wider design team. Concept site plans and architectural layouts for each option are attached in the document at Appendix 1 (Part 02: Site Appraisal Options).
- 3.8 Each site was then subject to appraisal by the wider project team, with Opportunities and Challenges identified across Location, Design, Site Conditions, Planning, Traffic Management, Logistics and Sustainability categories. A detailed summary of the key considerations for each site is also included in the document at **Appendix 1.**
- Guidance on external space requirements for schools is taken from the School Premises Act (1969). Based on a pupil role of 1400 pupils the total site area required would equate to approximately 69,000m2, resulting in a total required site area of approximately 98,000m2. It should be noted that whilst all of the shortlisted sites can accommodate the desired size of school building, none of the sites can deliver both the required size of building in addition to meeting external space requirements as defined in the 1969 Act. Agreement will require to be reached with the Scottish Government on both the size and quality of external space required for the new school. Officers consider this to represent a low risk to the project on the basis that contemporary thinking in education design in Scotland looks to consider quality of outdoor environment over alignment with historical guidelines. In addition officers are aware that the Scottish Government are actively reviewing the 1969 Act with a view to updating the criteria for new build facilities.
- 3.10 In addition to the education accommodation requirements for the Secondary School, consideration was also given to providing Early Years facilities, Community hall space and Community Library space as an optional addition to the wider project brief and is included in a number of the options considered. The rationale for this particular grouping of services is based on their compatibility with the educational aspects of the project and the feasibility of incorporating their spatial requirements alongside the design of a new school, in addition to the opportunity for these services to increase the use of any new asset created during weekends, evenings and holiday periods as a new "Neighbourhood Centre".
- 3.11 The sites at Boghead Playing Fields, Whitegates Playing Fields and the existing site at Myrtle Avenue were not considered for the co-location of these services due to limitations in available developable space at each site.
- 3.12 Given the Lenzie Rugby Football Club site has been considered an option within the feasibility review, officers have undertaken initial engagement with representatives from the Club to discuss the various development proposals and to determine

whether the Club have an interest in collaborating with the Council to deliver any of those. The Club have identified a number of initial requirements for any joint development proposal, including the retention of a dedicated clubhouse, to be owned by the Club, access to 4 pitches in total (2 owned by the Club and 2 available to let, with the proviso that the pitches available to let could be located at a separate site) and for assurances that the Club will be able to function wholly independently.

3.13 Options have been developed which meet the requirements of both the Council and the Rugby Club. These are summarised below and represent a further refinement of three of the shortlisted options. It should be noted at this point that the Rugby Club have not committed to any option and that they would require to put any proposal to their Membership for their consideration.

## **Site Option Appraisals**

- **3.14** A total of eleven potential development options are considered as part of the options appraisal. These are as follows:
  - Option 1: New tandem build on the existing school site, Myrtle Avenue
  - Option 2: New build on the site of Boghead Playing Fields, Boghead Road
  - Option 3: New build on the site of Whitegates Playing Fields, off Initiative Road
  - Option 4A: New tandem build on the existing school site at Myrtle Avenue / redevelopment of Lenzie Rugby Football Club site to form shared sports campus and Rugby Club
  - Option 4B: New tandem build on the existing school site at Myrtle Avenue / redevelopment of Lenzie Rugby Football Club site to form shared sports campus and Rugby Club (with additional pitch provision)
  - Option 5A: New build on the site of Lenzie Rugby Football Club
  - Option 5B: New build on the site of Lenzie Rugby Football Club (with additional community facilities)
  - Option 5C: New build on the site of Lenzie Rugby Football Club (with additional community facilities and additional pitch provision)
  - Option 5D: New build on the site of Lenzie Rugby Football Club / site at Myrtle Avenue redeveloped for Rugby Club
  - Option 6: Refurbishment of the existing school
  - Option 7: New Build School on Existing Lenzie Academy Site with Temporary Accommodation on Rugby Club Site. New Pitch Provision for Rugby Club and Early Years Centre on Lenzie Meadow MUGA. Refurbishment of Existing Lenzie Meadow Early Years Centre to Provide Additional Primary School Classrooms.

The detailed assessment of each option is included in **Appendix 1.** A summarised assessment of each option is included below.

## Option 1: New tandem build on the existing school site, Myrtle Avenue

- 3.15 This option involves the development of a campus setting for the new school, with two new school buildings located to the north east and south east sections of the existing Myrtle Avenue site, with pitch provision to an equal standard of that which the school currently enjoys. The campus option could facilitate a tandem build sequence, with pupils and staff remaining on site throughout the construction period.
- 3.16 The re-development of the existing site avoids the need for a 12 month statutory consultation period which would be necessary if the school is relocated to a new site,

- retains the Myrtle Avenue site in Council ownership, the continuation of its current planning use and offers well-established local transport links.
- 3.17 The opportunity for the co-location with other services is more limited with this option and the extent of construction phasing required to allow for both construction of new buildings and the demolition of existing buildings on the site means that the construction phase is longer than some of the other options under consideration.
- 3.18 The tandem nature of the project and limited space within the site means this option has the potential for the greatest impact on the operation of the existing school during this period and the educational experience of teachers and pupils. With a projected construction phase of close to 4 years, the pupils in the school would be studying within a construction site for the majority of their secondary education. Whilst tandem builds have been successfully delivered on other secondary school sites, the proximity of the new buildings to the existing school would undoubtedly impact the learning environment for all pupils.
- **3.19** The indicative total cost for Option 1 is £84,677,937, with an estimated total construction phase of 182 weeks.

## Option 2: New build on the site of Boghead Playing Fields Boghead Road

- 3.20 This option would see the development of a new school on the site of the existing sports pitches at Boghead Road, Lenzie. The site is primarily rectangular in shape with a triangular wedge at the north which would be best utilised for car parking. The site would allow for a single school building to be formed which would lend itself well to delivering low carbon design principles.
- 3.21 Relocation of Lenzie Academy to this site would involve a 12 month statutory consultation period led by Education. Boghead Road is located on the edge of the existing catchment area and settlement of Lenzie more generally, which is likely to generate additional journeys by car to and from the school given its remote location and significantly increase the number of pupils eligible for free bus travel.
- 3.22 The site is designated as green belt and open space within the Local Development Plan and therefore there is a presumption against development. The loss of pitch provision through the development of the site is also likely to be challenged by SportScotland with alternative replacement provision required to compensate elsewhere in the area.
- 3.23 The most significant constraint to development of the site is the presence of the outfall for the Gadloch beneath the site. This tunnel provides an outlet for excess water from the Gadloch to flow to the Park Burn. The tunnel is in poor condition and any development above this would not be recommended as this could contribute to a collapse of the tunnel and potentially impact the structure of any building located directly above.
- 3.24 The construction of a new school remote to the existing site would enable the school to operate as normal until such times as the new school was ready for occupation. In addition, development off site would result in the existing school site being surplus to requirements. This could facilitate a sale of the existing site to support the financial model for delivering the new facility or redevelopment of the site to deliver on other Council priorities.
- 3.25 The indicative total cost for Option 2 is £82,578,180 with an estimated total construction phase duration of 122 weeks.

## Option 3: New build on the site of Whitegates Playing Fields, off Initiative Road

- 3.26 This option would develop a new school on the site of the grass pitch and open space at Whitegates Playing Fields, immediately adjacent to Initiative Road and to the north of the Deaf Blind Scotland office. The site is largely flat and rectangular.
- 3.27 Relocation of Lenzie Academy to this site would involve a 12 month statutory consultation period led by Education. The site is designated protected open space within the Local Development Plan and therefore there is a presumption against development. The loss of pitch provision through the development of the site is also likely to be challenged by SportScotland with alternative replacement provision required to compensate elsewhere in the area.
- 3.28 The Whitegates site was considered as part of the site option appraisal for the development of the new ASN school, currently under construction at Waterside. The Waterside option was determined to provide a better development platform, fewer challenges with regard to underlying ground conditions, superior site access, and therefore a more cost effective option to the Whitegates site. When considering the Whitegates site in the context of a new Lenzie Academy, the site has been assessed against the other options available to deliver this project. Whilst the site has its challenges, it compares favourably with the other options detailed in this Report.
- 3.29 Access to the site for vehicles would be provided via a new access from the roundabout adjacent to Deaf Blind Scotland, off Initiative Road. Whilst the site is less central that the existing school, it is more accessible for pupils and staff who would choose to walk to the facility than the Boghead Road site, and would not generate the same requirement to provide free bus travel for pupils as option 2.
- **3.30** Similar to option 2 above, this would result in the existing school site being surplus to requirements.
- **3.31** The indicative cost for Option 3 is £85,475,988 with an estimated total construction phase duration of 122 weeks.
  - Option 4A: New tandem build on the existing school site at Myrtle Avenue/redevelopment of Lenzie Rugby Football Club site to form shared sports campus and Rugby Club
- 3.32 Similar to Option 1, this option involves the development of a campus setting for the new school, with two new school buildings located to the north east and south east sections of the existing Myrtle Avenue site. This option involves the relocation of the school PE department to the Lenzie Rugby Football Club site at Viewfield Avenue.
- 3.33 Whilst the re-development of the existing site would avoid the need for a 12 month statutory consultation period, this would be a requirement for this option given the partial relocation of the sports facilities. This option would retain the Myrtle Avenue site in Council ownership, continues its current planning use and well-established local transport links.
- 3.34 The use of the Lenzie Rugby Football Club site would be subject to reaching agreement with the Club for the development of the site as a shared community facility.

- 3.35 Similar to Option 1, the tandem nature of the project and limited space within the site means this option has the potential for the greatest impact on the operation of the existing school during the construction period and on the educational experience of teachers and pupils.
- 3.36 All options associated with development on the Lenzie Rugby Football Club site are subject to a risk in respect of securing an acceptable vehicular access to the site via Myrtle Avenue. A strip of land between the parking area adjacent to Lenzie Meadow Primary School and the Rugby Club site is not within Council ownership. The Council benefits from a vehicular and pedestrian servitude access across this strip of land, however this only conveys a right of access for the purposes of education, sport, leisure and/or recreation. The proposals detailed in this document would intensify this use significantly which would require further negotiation with the landowner to revise the existing agreement. This poses a significant risk to the delivery of any option that involves development of the Lenzie Rugby Football Club site as there is no other viable access to the site.
- **3.37** The indicative total cost for Option 4A is £90,285,377 with an estimated total construction phase duration of 179 weeks.
  - Option 4B New tandem build on the existing school site at Myrtle Avenue/redevelopment of Lenzie Rugby Football Club site to form shared sports campus and Rugby Club (with additional pitch provision)
- 3.38 This Option involves the redevelopment of the existing school site on a tandem build basis, with a new school and community facilities located to the south of the site on the existing sports pitches and the redevelopment of the Rugby Club site to form a new Clubhouse, school PE changing facilities, associated parking and 4 full-size sports pitches.
- 3.39 In comparison to Option 4A, this option introduces a larger, single building to the south of the existing school site which provides the opportunity for a simpler construction phase and delivers enhanced community facilities including community hall space and library. Additional pitches would be introduced to the Rugby Club site (4 in total) to provide the opportunity for 2 dedicated pitches for the Club and 2 for school / community use. There may be scope under this option to reduce the number of playing pitches to 3 on the Rugby Club site, reducing the cost slightly and reducing any potential impact on Lenzie Moss.
- 3.40 The development site encroaches into Lenzie Moss which is a Local Nature Reserve (LNR) and Local Nature Conservation Site (LNCS) and the lowland raised bog is of national importance. Development on this land would be considered contrary to Local Development Planning Policy (LDP Policy 3 Green Belt and LDP Policy 7 Designated Open Space). These designations create a heightened planning risk, whereby any proposal which is significantly contrary to the Local Development Plan and that the Planning Authority have an interest in requires to be notified to the Scottish Government if a decision is made to grant approval for the application.
- **3.41** As with option 4A, securing access to the Rugby Club site would still present a significant risk to the project.
- **3.42** The indicative cost for Option 4B is £96,041,137 with an estimated total construction phase duration of 233 weeks.

## Option 5A: New build on the site of Lenzie Rugby Football Club

- 3.43 This Option involves the development of a new secondary school on the Lenzie Rugby Football Club site to create an Education and Community Sports campus, incorporating facilities for Lenzie Rugby Football Club. The site would facilitate the construction of a single school building which would lend itself well to delivering low carbon design principles, with access taken via Myrtle Avenue. The site is adjacent to Lenzie Meadow Primary School and, given the size and topography of development area available, provides the opportunity to combine the Early Years service, currently located in Lenzie Meadow Primary School, within the new development on the Rugby Club site. This would provide the opportunity to increase the number of classrooms within the primary school via the relocation of the Early Years centre.
- 3.43 This option would involve the Rugby Club sharing access to sports pitches with the school, with a new clubhouse constructed for the rugby club to replace the existing building.
- **3.48** Relocation of Lenzie Academy to this site would involve a 12 month statutory consultation period led by Education.
- 3.49 Similar to Option 4B above, access to the site presents a significant risk to the project. In addition, this option (and Options 5B and 5C) would potentially encroach on Lenzie Moss, Option 5C in particular, heightening the planning risk significantly (as detailed at 3.40 above).
- **3.50** The indicative cost for Option 5A is £90,437,687 with an estimated total construction phase duration of 122 weeks.

## Option 5B: New build on the site of Lenzie Rugby Football Club (with additional community facilities)

- 3.51 This option is a further development of Option 5A above. In addition to the secondary school, early years and community sports facilities, the provision of a community hall and library would be included in the new facility.
- 3.52 The co-location of additional community facilities on the site provides the opportunity to deliver a place based approach through the creation of an asset which would provide multiple public services in a neighbourhood setting, accessible throughout the week and within easy walking distance for the majority of the community.
- 3.53 Constraints similar to those for Option 5A above apply to this option in relation to securing an access to the site and the adjacency of the development to Lenzie Moss.
- **3.54** The indicative cost for Option 5B is £95,090,235 with an estimated total construction phase duration of 122 weeks.

## Option 5C – New build on the site of Lenzie Rugby Football Club (with additional community facilities and additional pitch provision)

3.55 This Option is a further refinement of Option 5B, with school, early years and community facilities co-located alongside the Rugby Club on the Rugby Club site.

- In comparison to Option 5B, this Option introduces additional pitch provision within the Rugby Club site, extending the development boundary further into the Lenzie Moss area (land owned by East Dunbartonshire Council).
- 3.56 The risks referred to above for options 5A and 5B regarding access and proximity to Lenzie Moss apply equally to this option, although to a greater extent with regard to encroachment on Lenzie Moss.
- **3.57** The indicative cost for Option 5C is £96,639,765 with an estimated total construction phase duration of 122 weeks.

## Option 5D – New build on the site of Lenzie Rugby Football Club / site at Myrtle Avenue redeveloped for Rugby Club

- 3.58 This Option is a further refinement of Option 5B, with school, early years and community facilities located on the Rugby Club site in addition to sports pitches for the school. However, under this Option the Rugby Club facilities would be relocated to the existing school site (including Clubhouse and sports pitches).
- 3.59 This Option would reduce the overall development area required at the Rugby Club site (and therefore reduce the planning risk associated with development within Lenzie Moss) and provide dedicated facilities for the Rugby Club through repurposing the school site at Myrtle Avenue. Under this option there may be the opportunity to create an area of surplus development land within the school site for disposal to realise additional income however the opportunity to realise any significant receipt from the sale of the existing school site would be lost.
- 3.60 Comments above pertaining to Options 5A, B and C regarding access to the site apply equally to this option in so far as this represents a significant risk to the delivery of this proposal.
- 3.61 The indicative cost for Option 5D is £96,639,765 with an estimated total construction phase duration of 217 weeks. This allows for 90 weeks to demolish the existing school and repurpose the site for use by the Rugby Club. It should be noted that the logistics of this option are challenging in so far as the Rugby Club would need to be accommodated on an alternative site until such times as the new school was completed and the old school demolished. Those discussion have not taken place with the Club and represent a risk to the project.

## Option 6: Refurbishment of the existing school

- 3.62 This option would refurbish the existing school building and require the provision of temporary decant accommodation within the site to allow the phased refurbishment of the current teaching accommodation. Alternative arrangements for outdoor PE would be required during the construction phase as the temporary accommodation would be positioned at the south west corner of the site on the area currently occupied by one of the school sports pitches.
- 3.63 The existing school consists of the Main School building, with classrooms wrapped around an internal courtyard, and the Gym Hall, constructed around 1960, with some further expansion between 1997 and 2009. The separate sports block was constructed around 2000. The newer east extension block of classrooms is connected via a link corridor.

- 3.64 A detailed condition survey was undertaken during the course of the feasibility exercise to gauge the current condition and forward works plan for the existing school building. Significant modernisation is required throughout the school to deliver a modern, fit for purpose and energy efficiency secondary school. The report identifies a number of constraints which would present either a design, construction or logistical challenge through refurbishment, particularly in the main school building, including:
  - Low floor to ceiling heights which will impact the replacement of M&E services, in particular modern ventilation systems
  - Classroom sizes too small to meet the current Building Standards for secondary education and would need to be reconfigured
  - Numerous level changes throughout the main teaching block which would require to be made fully accessible
  - Existing building orientation and classroom dimensions will limit the opportunity to achieve Enerphit accreditation for the project
- 3.65 As with Options 1 and 4, the tandem nature of the project and limited space within the site also mean this option has the potential for the greatest impact on the operation of the existing school during this period and the educational experience of teachers and pupils over an extended period of time.
- 3.66 The re-development of the existing site avoids the need for a 12 month statutory consultation period which would be necessary if the school is relocated to a new site, retains the Myrtle Avenue site in Council ownership, the continuation of its current planning use and offers well-established local transport links.
- 3.67 This option also has the opportunity to reduce the embodied carbon used during the construction process (i.e. the total carbon impact of construction activity, including building materials) as fundamental parts of the existing building can be re-used (such as the main structure and large parts of the external envelope). In-use energy performance is likely to be more difficult to estimate and control over the lifecycle of the refurbished building and is not projected to provide as energy efficient a building as a new build school.
- **3.68** The indicative cost for Option 6 is £83,370,504 with an estimated total construction phase duration of 178 weeks.
  - Option 7 New Build School on Existing Lenzie Academy Site with Temporary Accommodation on Rugby Club Site. New Pitch Provision for Rugby Club and Early Years Centre on Lenzie Meadow MUGA. Refurbishment of Existing Lenzie Meadow Early Years Centre to Provide Additional Primary School Classrooms
- 3.69 This option would be delivered in multiple phases across both the existing Lenzie Academy site and the western area of the Lenzie Rugby Football Club site to allow for a new build Lenzie Academy on the existing site, whilst incorporating a new build Early Years facility within the Lenzie Meadow Primary School boundary, in addition to new pitch provision and extension of Lenzie Meadow play space to the south of the primary school site. This option would also include scope to adapt the existing early years area within Lenzie Meadow Primary School to provide additional classroom space.

- **3.70** The phases involved for Option 7 are as follows:
  - Modular temporary accommodation will be located on the site south of Lenzie Meadow Primary School to allow for decant and operation of the Secondary School while the existing Lenzie Academy is demolished.
  - The new school building will then be located on north of the existing site. The
    existing pitch provision would be maintained allowing the contractor to use the
    football pitch for site compound and storage after which the area would be
    reinstated.
  - Parking facilities will be located to the north as well as vehicular access via Elm Avenue with pedestrian access to the south of the site via Myrtle Avenue.
  - Once the new build is complete, the pupils will return to the new facility and the temporary accommodation will be removed, allowing the area to be developed for a replacement MUGA pitch for Lenzie Meadow Primary School in addition to an all-weather training pitch for the Rugby Club and a playground extension for Lenzie Meadow Primary.
  - Once the new Lenzie Meadow MUGA has been installed a new standalone Early Years Centre would be constructed on the site of the existing Lenzie Meadow MUGA.
  - The final phase would be to convert the existing Early Years area within Lenzie Meadow Primary School into classroom space.
- 3.71 This option allows for the Rugby Club to remain operational during the construction phases due to the location of the temporary accommodation and new pitch provision, however this option presents the same level of access and planning risk as options 5 A D due to the requirement to cross land out-with the Council's ownership to access the development site and the extent the development site encroaches into the Lenzie Moss Nature reserve.
- 3.72 The indicative cost for Option 7 is £110,613,642 with an estimated total construction phase duration of 236 weeks. This option is not considered realistic given the constraints, costs and overall programme for delivery, but has been included for completeness.

## Summary Cost and Construction Programme Comparison

**3.73** A summary comparison of the cost and construction phase durations for all options is included below:

Option	Indicative Cost	Construction Phase
Option 1: New phased tandem build on the existing school site	£84,677,937	182 weeks
Option 2: Boghead Road	£82,578,180	122 weeks
Option 3: Whitegates Playing Field	£85,475,988	122 weeks
Option 4A: Lenzie Academy and Lenzie Rugby Club Sites	£90,285,377	179 weeks
Option 4B – Lenzie Academy and Rugby Club Sites (enhanced)	£96,041,137	233 weeks

Option	Indicative Cost	Construction Phase
Option 5A: Lenzie Rugby Club Site	£90,437,687	122 weeks
Option 5B: Lenzie Rugby Club Site (with additional community facilities)	£95,090,235	122 weeks
Option 5C – Lenzie Rugby Club site with additional pitch provision	£96,639,765	122 weeks
Option 5D – Lenzie Rugby Club site with existing school site repurposed for Rugby Club	£96,639,765	217 weeks
Option 6: Refurbishment of the existing school	£83,370,504	178 weeks
Option 7: New Build School on Existing Lenzie Academy Site with Temporary Accommodation on Rugby Club Site as well as New Pitch Provision for Rugby Club and Early Years Centre on Lenzie Meadow MUGA and Refurbishment of Existing Lenzie Meadow Early Years to Provide Additional Primary School Classrooms	£110,613,642	236 weeks

## Qualifications, Commercial Implications and Funding

- 3.74 Cost estimates at the feasibility stage of any project are notoriously difficult to provide with accuracy and so a number of qualifications to the costs provided within the Report are noted below for consideration.
- 3.75 Designs developed to date for each option are at feasibility stage only and will be subject to a significant degree of design development as the project progresses, providing a greater extent of design information which in-turn will be developed into a more detailed elemental cost plan for the project. As with all Major Asset projects, this will be updated on a regular basis with regular updates provided to Council via on-going Capital Monitoring reports and through Stage 1 and Stage 2 Gateway Reports to Council.
- 3.76 The base cost for each Option has been developed by applying the tendered m2 cost rate for the Boclair Academy project which is currently under construction, with an inflationary pressure added. This rate has then been applied to the Gross Internal Floor Area for the building in each option. The June 2022 costs have been determined through discussions with suppliers and sub-contractors, benchmarking to recent McLaughlin & Harvey tenders with current rates from supply chain, independent reviews by Cost Consultants Brown and Wallace and reflect high inflationary pressures due to fuel, material and labour shortages caused by current market conditions further exacerbated by the conflict in Ukraine.

- 3.77 Site abnormals for each Option (based on a desktop analysis only of each site, i.e. without the results of any physical surveys on each site) have been priced as part of a separate exercise, with input from the full design team. The base cost for each building added to the site abnormals provided a benchmark cost rate for each Option.
- 3.78 This benchmark cost rate for each Option has then been uprated to reflect the estimated additional costs associated with achieving the building performance targets of the Scottish Future's Trust Learning Estates Investment Programme. This additional cost for each option is included in the indicative costs provided above.
- 3.79 The Learning Estates Investment Programme seeks to enable the delivery of new educational facilities across Scotland through providing grant funding for projects which are able to demonstrate in practice (on an annual basis) the achievement of ambitious energy efficiency targets, high quality digital infrastructure and an on-going commitment to lifecycle maintenance to ensure the building remains in good condition throughout its life.
- 3.80 The costs associated with the high standards of energy efficiency required by the programme, particularly through the specification and selection of materials, orientation and air-tightness of the building and the use of low or zero carbon mechanical and electrical plant attract a significant premium (on average £15m in additional costs per option) in comparison to the costs of developing a new school which comply with current building standards (the minimum alternative).
- 3.81 The Learning Estates Investment Programme has recently updated funding criteria to include a requirement for projects to demonstrate they can achieve an embodied carbon target. For options, 1- 4 the embodied carbon target can be achieved. For options 5 A D and 7 the target can be achieved through the materials used on the project, however there is a risk we could exceed this target due to presence of peat identified in some areas of the Lenzie Moss. Any excavation in this area, may result in peat being removed, which will release significant quantities of embodied carbon within the peat. This may not be able to be fully offset within a Net Zero carbon design. Narrative regarding embodied carbon and operational carbon has been provided for Option 6 in the appropriate section of the Report.
- 3.82 The Scottish Government offers grant funding for eligible projects which aim to deliver against the target outcomes of the Learning Estates Investment Programme. In contrast to other Scottish Government grant funding for education projects received previously (e.g. The Schools for the Future Programme) the funding is revenue and not capital, is paid on an annual basis, and the level of funding secured annually is dependent on the Council demonstrating that energy efficiency targets are achieved in practice. The on-going monitoring and management of the school building therefore becomes an even more important on-going consideration than normal.
- 3.83 The reductions in carbon emissions from a new school designed on these energy efficiency principles will make an important contribution towards the Council's wider aspirations to reduce carbon emissions in the move towards Net Zero.

#### **Risks**

3.84 As with any major construction project, there are a number of inevitable risks which may impact cost, programme or scope as the project develops and the management and mitigation of these will be a key priority for Officers and the wider construction team throughout the project lifecycle.

- 3.85 The risk profile across each site will be influenced by a range of factors, including physical site constraints, such as abnormal ground conditions, site layout, building arrangement and construction complexity.
- 3.86 There are a number of risks which can be identified at this stage across the project generally. Some have been referenced in the body of the report above. These are summarised below along with suggested mitigation:

Risk	Mitigation
Planning considerations – in particular for Options 5A – 5D and 7 around the Lenzie Moss area. Development on this land would be considered contrary to Local Development Planning Policy (LDP Policy 3 – Green Belt and LDP Policy 7 – Designated Open Space). These designations create a heightened planning risk, whereby any proposal which is significantly contrary to the Local Development Plan and that the Planning Authority have an interest in requires to be notified to the Scottish Government if a decision is made to grant approval for the application.	Pre-application consultation with EDC Planning service, statutory consultees and other relevant stakeholders.
Disruption due to working on live school site – in particular for Options 4 and 6.	Robust phasing plans and programmes which are agreed throughout the construction supply chain.  On-going engagement with key stakeholders to forward plan upcoming works, advise progress and actively minimise disruption.
Abnormal ground conditions – while the risk of abnormal ground conditions exist across all options, the risk is significantly heightened for Options 4B, 5A-D and Option 7, due to the Rugby Club's requirement to minimise intrusive ground investigation on their pitches and known area of peat deposits within the Lenzie Moss area.	Early commissioning of site investigation surveys.  Early negotiations for access to rugby club pitches to undertaken intrusive ground investigations  Early appointment of specialist consultants to help mitigate abnormal conditions through design solutions.
Until such times as further intrusive ground investigations can be completed the design may have to progress at risk with EDC required to accept ground risk on areas that could not be suitably investigated as part of any construction contract.	Totaliono amough doolgii dollationo.

Risk	Mitigation
Market capacity and conditions	Early and on-going involvement from contractor commercial team in design development to ensure any material shortages / capacity issues are reflected in the selection and specification of products for the building.
Pricing Risk and Inflation – there continues to be high inflationary pressures due to fuel, material and labour shortages caused by current market conditions, which are further exacerbated by the conflict in Ukraine.	Ongoing review of project costs at key design stages.
Roads and traffic	Early appointment of Traffic and Transportation consultants to undertake Traffic Impact Assessment and inform early stages of design development.  Early consultation with Roads and Transportation stakeholders.
Servitude - Options 5A – D and Option 7	Early engagement with affected landowner to negotiate revision to servitude or land purchase to facilitate site access.

## **Recommendation and Next Steps**

- 3.87 Having given due consideration to all site constraints, impact on pupils and staff during the construction phase, location of the proposed new facility and impact on pupils in terms of increased travel distances, projected costs, programme, deliverability, site access, third party rights and dependencies, in addition to planning constraints and the impact on the environment, it is the recommendation of officers that Option 3, development of the Whitegates site, provides the best option of those considered for the construction of a new Lenzie Academy, and that option 3 be presented to the school community in early course as part of early engagement in advance of a formal submission to the Learning Estates Improvement Programme by the end of October 2022.
- 3.88 Subject to Council approval of the recommendations within this Report and the instruction to proceed with the preferred site, the next steps for the project will involve the formal commencement of the pre-construction phase for the project.
- 3.89 This will involve the preparation and submission of a funding application to the Scottish Government's Learning Estates Investment Programme by the confirmed deadline of 31 October 2022 and then the development of detailed design proposals for the project, including obtaining all necessary statutory consents, completing site surveys, the preparation of cost reports and ultimately the competitive tendering of the project (via a main contractor).

- 3.90 The anticipated timescale for the pre-construction phase of the project will be around 157 weeks. The estimated costs associated with the pre-construction phase of the project are £3.5m.
- **3.91** Funding awards for the next round of the Learning Estate Investment Programme are expected to be made before the end of 2022, meaning that Council will have a further opportunity to consider whether or not to proceed with the project dependent on the outcome of the funding application.
- 3.92 As described at paragraph 3.5, the feasibility work on the project to date has been undertaken in partnership with McLaughlin and Harvey via the Scape Framework. Officers would formalise and extend this engagement via a Pre-Construction Services Delivery Agreement which would be negotiated and agreed during October and commence from November onwards.
- 3.93 In order to maintain momentum from the feasibility stage of the project and with a view to preparing as comprehensive a submission as possible to the Learning Estate Investment Programme, a short-form agreement has been drafted between the Council and McLaughlin and Harvey to allow the extension of the feasibility stage to complete general planning and preparation for the funding application.
- 3.94 Thereafter, subject to future Council approval of the final tendered construction sum, Officers would intend to continue this arrangement through the entirety of the project, including the construction phase of the new school. Further information on the detailed contractual implications of this will follow via the Gateway Stage 1 and Stage 2 Reports which will be presented for Council approval during the course of the preconstruction phase.
- 3.95 The intention to use the Scape Framework procurement route for the Lenzie Academy project reflects the highly positive experience to date on the Boclair Academy Project (along with the Additional Support Needs School, Kirkintilloch and Allander Leisure and Day Care Centre, Bearsden); the opportunity for the transfer of knowledge and lessons learned between these projects to positively benefit Lenzie Academy; the knowledge and awareness of the project developed by the team through the feasibility stage to date; and the relatively short time period available to prepare and submit a funding application to the Learning Estate Improvement Programme.

## 4.0 <u>IMPLICATIONS</u>

The implications for the Council are as undernoted.

- **4.1** Frontline Service to Customers None at present.
- **4.2** Workforce (including any significant resource implications) None at present.
- **4.3** Legal Implications None at present.
- 4.4 Financial Implications None at present, however there would be further financial implications where a successful LEIP application then required the Council to allocate additional capital funding for the project. This would require to be allocated via the Council's approved 10 Year Capital Investment Programme to meet the projected cost of the project which is currently assessed to be in excess of the £80m

allocated within the Programme. Given the limits on the capital programme this may require other projects to be re-provisioned, reduced or removed.

- **4.5** Procurement none at present.
- **4.6** ICT none at present.
- **4.7** Corporate Assets none at present.
- **4.8** Equalities Implications none at present.
- **4.9** Sustainability none at present.
- **4.10** Other none.

## 5.0 MANAGEMENT OF RISK

The risks and control measures relating to this Report are as follows:-

- 5.1 Suitably qualified and appropriately experienced architects, engineers and cost consultants have led the development of design proposals for the project to date. Appropriate collateral warranties will be obtained in the Council's favour from key members of the design team if LEIP funding is secured and the project were to progress.
- 5.2 The final contract costs would be based on an open-book market testing process directed by a suitably qualified and appropriately experienced main contractor, in accordance with the various requirements of the SCAPE framework.

## 6.0 IMPACT

- 6.1 ECONOMIC GROWTH & RECOVERY Investment in the new facilities represents a significant economic development opportunity for SMEs in East Dunbartonshire. The project requires the main contractor to actively engage with the local SME supply chain and will target a proportion of contract spend to be awarded to this level of business.
- **EMPLOYMENT & SKILLS** Investment in the new facilities represents a significant employment and skills development opportunity for people in the local area. The project requires the main contractor to actively engage with young people in particular and to offer graduate / apprenticeship employment opportunities and to engage with young people through skills workshops and activities within local schools.
- **6.3 CHILDREN & YOUNG PEOPLE** The proposed development will provide an essential new facility for the children of East Dunbartonshire.
- 6.4 SAFER & STRONGER COMMUNITIES N/A
- 6.5 ADULT HEALTH & WELLBEING N/A
- 6.6 OLDER ADULTS, VULNERABLE PEOPLE & CARERS N/A

- **6.7 CLIMATE CHANGE** The proposed new facilities contribute directly to the climate change agenda through the promotion of sustainable transport, improvement of greenspace and through investment in a new facility which will look to improve energy performance / reduce energy demand.
- **6.8 STATUTORY DUTY** The project supports the Council in undertaking its statutory duty as Education provider.

## 7.0 POLICY CHECKLIST

**7.1** This Report has been assessed against the Policy Development Checklist and has been classified as being an operational report and not a new policy or change to an existing policy document.

## 8.0 APPENDICES

8.1 Appendix 1 - Part 02: Site Appraisals Options

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## **PART 02**

## Site Appraisal Options

#### Option 1 - Existing Lenzie Academy Site - new phased tandem build

Site Location	Option Proposal	Key Provision
Site Location Lenzie Academy, Myrtle Avenue, Lenzie	Option Proposal	Key Provision Site Area = 39,870m2  Facilities: School only - new, phased, tandem build. (No Community Hall, Library or Early Years provision included within this option due to limited site area)  Outdoor Sport Provision: 1x full size rugby pitch 1x full size football pitch  Parking Provision: 75 parking spaces total

### Site Analysis

#### Location

#### Opportunities

- Maintains the school within the centre of the community, which reinforces the 'Place Initiative'
- Maintains all teaching accommodation on the Lenzie Academy Site established location / familiarity to school and no change to transportation etc.

#### Challenges

- · Existing kitchen needs maintained as this provides meals to other schools
- Bus pick up to be considered during tandem build. Bus size to be reviewed, potential to use Lenzie Meadow
- Current school lets to be considered
- Impact of COVID 19 on pupils in last few years and potential disruption whilst tandem build ongoing

#### Design

- Campus arrangement of the school enables the overall impact of the new building mass to be broken down into smaller built forms that are easier to plan based on functionality, orientation, and indoor/outdoor connections
- Building design with assembly and dining areas located in the north access block encourages school community events and social functions
- New build which gives the opportunity to maximise passive design measures through enhanced fabric, passive solar and form factor
- Plant space can be strategically located to suit access, distribution, acoustics
- · External pitch provision equal to that which is currently enjoyed by school







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#### Challenges

- Limited site area to locate the new school buildings, tandem build as existing school will remain operational
- Outdoor space is considerably compromised. Mitigation: EDC require derogation of the Schools Premises Regulations and will focus on quality of outdoor environment rather than overall area of outdoor spaces
- Car parking provision limited to circa 75 spaces. Final car parking numbers to be agreed with EDC Education, Planning & Transport departments Mitigation: Opportunity to look at reduced parking spaces due to existing sustainable transport options available within the vicinity of the site
- Incorporating an Early Years Centre, Community Hall, Library & associated parking will put further pressure on the site area
- Reduction of available playground and outdoor PE during construction. Mitigation: potential
  to use Rugby Club pitches during construction or alternative EDC facilities which
  pupils can be bused to. Timetabling would need considered
- Two separate building blocks means more façade heat loss overall therefore additional challenges around fabric performance may be required to achieve LEIP funding. *Mitigation:* Environmental modelling to consider two separate buildings and provide optimum envelope solution

#### Site Conditions

#### Opportunities

- Site is surrounded by a network of buried and pole mounted BT Openreach infrastructure –
  good potential to achieve LEIP funding digital infrastructure requirement of 1Gbps
- The site seems fairly sheltered from external noise sources which is beneficial from an acoustic perspective
- · Availability of mains water on site to feed new school
- Existing High Voltage (HV) infrastructure available
- Potential for surface water connection to culverted watercourse adjacent to Myrtle Avenue Challenges
- Risk: No Site Investigation, Topographical or GPR surveys have been carried out due to the
  existing site being operational
- Potential for diversions of existing services to allow existing school to remain live
- Review of whether there is HV on Myrtle Avenue otherwise new HV connection would need
  to be routed from Elm Avenue around existing building to feed new substation. Current utility
  plans show above ground HV however this at odds which what can be seen on the street.
   Mitigation: Utilities survey required to determine existing HV route
- Increase in hard standing during construction phase may result in temporary attenuation requirements and /or enabling phase
- Scottish Water likely to request betterment of surface water discharge rate and treatment
- · Site within Coal Authority reporting area

#### **Planning**

#### Opportunities

Existing land use is established, therefore limited policy conflict with LDP on land use

#### Challenges

- Scale of new building would need careful planning against existing housing. Impact of a 3storey building especially considering the neighbouring residential properties. *Mitigation:* building is reduced to two storeys where practicable to reduce overshadowing
- Site is located within the Beech Road / Garngaber Avenue Conservation Area and within the Townscape Protection Area, which will have to be considered as part of the design proposals
- Numerous mature trees within the site which will have to be considered (root protection areas etc) Mitigation: Tree survey required to allow design team to review information and consider implications

## Traffic Management

## Opportunities

Existing site so established walking and cycling routes are maintained

- Increase in pupil role so potential increase in traffic movement for pupil drop-off / pick-up
- Existing Lenzie site has staff access from the north and pupil drop-off / pick up via access from the south. The new concept would be to take all vehicular access from the north via Elm Avenue
- · Construction traffic will need to be carefully managed







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#### Sustainability

#### Opportunities

Potential to improve the site for ecology through the inclusion of habitat for wildlife such as
trees, hedges, and wildflowers as well as boxes for bats and birds. Potential to create habitat
features such as green roofs, water features and nature immersion sites for children

#### Challenges

- Bat surveys of building and any trees that will be removed will be required. Potential for NatureScot licence to be required if a bat roost is present and mitigation to be included in the new school
- Potential for nesting birds in existing buildings could be timing restrictions with demolition works Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales

## Logistics

#### Challenges

- Limited site for new build development, likely using both existing pitches, which would be unavailable to school use during construction
- Limited site access. Expectation that Myrtle Avenue would be used for site access, with pupils and staff entering the site from the North at Elm Avenue
- Level of disruption to the existing school while works are being developed in tandem with the
  existing school still in operation
- Logistically difficult to plan given the number of phases required to be able to maintain the
  existing building operational will result in an extended programme of works. Mitigation: Full
  logistics phasing plan to be prepared by Main Contractor and agreed with EDC
  Education
- Phased tandem build means new substation would need to be built to serve new school while
  existing substation is kept live
- Given site constraints new substation would be needed in advance of new works for temporary power
- Phasing would mean that separate plant provision for heating, hot water, ventilation and power would be required which may increase cost and maintenance requirements

## Option 2 - Boghead Road Site

Site Location	Option Proposal	Key Provision
Boghead Playing Fields, Boghead Road,		Site Area = 36,704m2
Lenzie  Lenzie		Facilities: School only - new build. (No Community Hall, Library or Early Years provision included within this option due to limited site area and location is out with the centre of town for community use)  Outdoor Sport Provision: 1x full size rugby pitch 1x full size football pitch  Parking Provision: 75 parking spaces total





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## Site Analysis

#### Location

#### Opportunities

- No requirement for temporary accommodation, or direct interface between construction traffic and pupils/staff during build phase
- Simple tandem build option with no disruption to the school during construction

#### Challenges

- Increased use of cars to drop off and/or changes to school bus timetable due to location of site
- Location in edge of catchment most pupils will have to travel further, in some cases via unsustainable transport methods
- Disconnected from the town centre. Site outside the Lenzie Town Centre will not encourage active forms of transport. Green Travel Plan needs careful consideration

#### Design

#### Opportunities

- Vacant area of site offers North/South orientation, which offers greater potential to control solar gain and balance heat loss from the building
- Single building form will improve departmental connections
- Building design with assembly and dining areas located at the heart of the plan and connected to the main entrance concourse encourages school community events and social functions

#### Challenges

- Outdoor space is considerably compromised. Mitigation: EDC require derogation of the Schools Premises Regulations and will focus on quality of outdoor environment rather than overall area of outdoor spaces
- Car parking provision limited to circa 75 spaces. Final car parking numbers to be agreed with EDC Education, Planning & Transport departments. Mitigation: Sustainable transport options to be considered for staff and pupils

#### Site Conditions

#### **Opportunities**

- Site is surrounded by a network of buried and pole mounted BT Openreach infrastructure –
  good potential to achieve LEIP funding digital infrastructure requirement of 1Gbps
- The site seems fairly sheltered from external noise sources which is beneficial from an acoustic perspective
- HV infrastructure running on Boghead Road which can be brought into site
- Main water on Boghead Road that can be brought into site. Water on correct side of the road to avoid crossing

#### Challenges

- Risk: No Site Investigation, Topographical or GPR surveys have been carried out yet.
- Site is directly adjacent to housing therefore location of external plant such as air source heat pumps would need to be strategically placed. *Mitigation: Noise survey required to* determine optimum location
- HV is shown on other side of Boghead Road so some road disruption would be needed to route across the road to feed into the site
- · Sewer connections likely to require pump stations
- Historical boreholes indicate 3-4.5m to rockhead BGL potential for piled foundations
- Site within Coal Authority reporting area
- Mine shafts located to the north and south of the site may require grouting works

#### **Planning**

#### Opportunities

· Located on edge of an established urban area

- Any overall loss of pitches will be resisted. Pitches are identified as being of very good quality in the Open Space Strategy. Mitigation: Alternative pitch provision to be arranged by EDC
- Building form/ massing will need consideration, in relation to the rural and greenfield setting
- Impact of a 3-storey building especially considering the neighbouring residential properties.
   Mitigation: building is reduced to two storeys where practicable to reduce overshadowing







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- Access to Lenzie Moss would be required to be retained/realigned. An informal right of way
  access across the north of the site to be considered. Mitigation: Public right of way will be
  suitably reprovided
- Adjacent Lenzie Moss is a Local Nature Reserve (LNR) and Local Nature and Conservation Site (LNCS) and the lowland raised bog is of national importance
- Allocated as green belt (LDP Policy 3 and LDP2 Policy 1), therefore there is a presumption
  against development at both a local and regional policy level. Exceptions identified in
  ClydePlan include proposals which meet a specific locational need
- Designated open space (LDP Policy 7) and green network (LDP Policy 5 and LDP2 Policy 1), therefore there is an LDP policy presumption against development which does not protect and enhance the green network
- SEPA requires a peat depth survey and watercourse to be assessed

## Traffic Management

#### Opportunities

 Boghead Road is built to a good standard and should be able to accommodate the additional traffic associated with the new school. Capacity check will be required at the access junction and at the Crosshill Road junction as well as the B812 / B819 junction to the south

#### Challenges

- New school site which would be accessed from Boghead Road is at the edge of Lenzie rather
  than being in the centre so it would be less sustainable in transport terms. The number of
  pupils travelling by car would likely increase as average walking distances increase from the
  school catchment as a result of re-location
- Vital that a drop-off / pick-up facility of the same or greater size is accommodated within the site to avoid activity on Boghead Road which is not suitable for on-street drop-off / pick-up activity
- Site needs to allow for access by buses and coaches
- Would be desirable to have a separate service vehicle access
- Likely need for new pedestrian crossings on key pedestrian desire lines to the site

#### Sustainability

## Opportunities

There is limited habitat that is beneficial for wildlife on the current site so there is potential to
improve the site through the addition of trees, shrubs and wildflowers that would be
beneficial, along with the potential for the integration of bird and bat boxes. Created habitat
could be connected into the Lenzie Moss to produce commuting corridors for wildlife such as
bats

#### Challenges

- Careful planning of drainage and runoff required to ensure that Lenzie Moss bog is not adversely affected. Mitigation: Ecology and hydrology surveys to be undertaken to inform any proposals and provide recommendations to avoid unacceptable adverse impacts
- Runoff and dust from the construction works has the potential to adversely affect the habitat present in Lenzie Moss. Construction management plan to inform dust management.
- Potential for deterioration due to higher footfall from children accessing the area, also
  potential for higher levels of litter Mitigation: Dedicated footways will reduce the
  opportunity for desire lines to be created. Given the direction that children will access
  the school, any such impact may not be unacceptable. Depending on the outcomes of
  the ecology surveys, mitigation measures can be adopted to reduce any direct impact.
- Potential for bat roosts within the mature beech trees in south-west corner surveys would be required of any trees to be felled and appropriate mitigation/compensation. Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- High potential for water vole within the site with water vole confirmed within the adjacent habitat. NatureScot licence will likely be required. Translocation area may be required.
   Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales

#### Logistics

- · Single build, no phasing required
- Vacant, largely flat site, mitigating expensive groundworks/ levelling solutions







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## Option 3 - Whitegates Site

Site Location	Option Proposal	Key Provision
Whitegates Park, Initiative Road,		Site Area = 52,053m2
Kirkintilloch	Service Servic	Facilities: School only - new build. (No Community Hall, Library or Early Years provision included within this option due to limited site area and location is out with the centre of town for community use)
		Outdoor Sport Provision: 1x full size rugby pitch 1x full size football pitch
	Ø.	Parking Provision: 75 parking spaces total

#### Site Analysis

Location	Oppo

## Opportunities

- No requirement for temporary accommodation, or direct interface between construction traffic and pupils/staff during build phase
- Simple tandem build option with no disruption to the school during construction

#### Challenges

 1 mile from existing site, potential increase use of cars to drop off and/or changes to school bus timetable

## Design

## Opportunities

- Single building form will improve departmental connections
- Building design with assembly and dining areas located at the heart of the plan and connected to the main entrance concourse encourages school community events and social functions

### Challenges

- A challenging site arrangement limits the available pitch and school arrangement.
- Site landlocked between residential properties and by-pass road making school entrance less welcoming and hidden from approach
- Outdoor space is considerably compromised. Mitigation: EDC require derogation of the Schools Premises Regulations and will focus on quality of outdoor environment rather than overall area of outdoor spaces
- Car parking provision limited to circa 75 spaces. Final car parking numbers to be agreed with EDC Education, Planning & Transport departments. Mitigation: Opportunity to look at reduced parking spaces and encourage sustainable transport options available within the vicinity of the site

#### Site Conditions

- Site is surrounded by a network of buried and pole mounted BT Openreach infrastructure good potential to achieve LEIP funding digital infrastructure requirement of 1Gbps
- Availability of mains water on site to feed new school







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#### Challenges

- The adjacency of the A806 may present acoustic challenges for the school in terms of opening windows Mitigation: Noise survey required to determine final window design
- Proximity of external plant to existing dwellings will be important for acoustics. Mitigation:
   Noise survey required to determine optimum location
- Risk: No Site Investigation, Topographical or GPR surveys have been carried out yet.
   Mitigation: Refer to previous SI carried out during the ASN School Feasibility study
- The nearest HV cable is located on Laurel Avenue which is some distance from the site.
   Significant HV infrastructure works would be required route HV to the site to feed the new substation required. Potential issues with getting HV into the site from the Woodside Avenue given height difference between road and the site level
- Telecoms incoming routes also from Woodside Avenue which may present issues due to the level differences
- Scottish Water infrastructure in north west of site requirement for 6m wide wayleave and build over unlikely other than landscaping
- Peat bands up to 4.1m BGL and significant depths of made ground present likely requiring piling
- UK Radon maps show that the site straddles an area with a maximum radon potential of 5-10% - radon protection measures potentially required. Likely ground gas measures required. Mitigation: Gas membrane below slab, venting requirements to be determined by specialist sub-contractor
- Surface water flooding potential at low spots to all boundary lines. Mitigation: Flood Risk Assessment will be required to determine hydrology of site with scope developed alongside EDC Flood Team
- Invasive species present Japanese knotweed, horsetail & cotoneaster. Mitigation:
   Ecology survey to determine location and extent. Removal/management strategy to be
   developed by Contractor
- New road connection required from Initiative Road roundabout
- Road construction likely to require significant capping and geogrids

#### **Planning**

- Accessible within the settlement boundary of Lenzie
- Sustainable transport links to the site
- Surrounded by urban development, therefore the development will not be out of character Challenges
- Allocated as protected open space (Policy 7) in LDP
- Potential presence of peat will be a planning issue. Mitigation: Forthcoming National and Local Policy does not support any proposals which have a negative impact on peatland. Further investigation needed to understand the extent of any peatland. Any impact would require to be mitigated and the wider proposal would need to demonstrate the locational need and essential infrastructure
- Open Space Strategy notes this site as having good multifunctional quality
- One of only two neighbourhood parks in Lenzie
- Existing pitches on site will be lost, leading to overall reduction in pitch provision, unless replaced.
- Access to the site is challenging
- Ecology surveys required to consider biodiversity impact a number of trees and wildlife
  corridors present. Potential for water vole to use the area with extensive suitable habitat
  available. Mitigation: Preliminary Ecological Assessment required to determine extent
  of wildlife surveys and critical timescales. Tree survey required to allow design team
  to review information and consider implications
- Forth & Clyde Canal feeder located at south-west, which is a scheduled monument
- Core Paths and Public Rights of Way are located across the site (LDP Policy 5). Well used footpath connections which will have to be redirected. Mitigation: Core path and public right of way will be suitably reprovided
- Likely that the loss of this open space provision will be strongly resisted by neighbours and wider community







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## Traffic Management

#### Opportunities

Site is quite close to centre of Lenzie so good opportunities for pupils to walk to the school

## Challenges

- Vehicular Access into this site is problematic. The Holmes Miller study indicates that access would be from the A806 Kirkintilloch bypass. It is not a simple case of adding an extra arm to the roundabout so the arm providing access into "Deafblind Scotland" would need to be reconfigured to form a shared access road to the school and the existing building. The traffic impact on the roundabout would also be a key consideration
- Concern that pupils would be routeing along the A806 to access the site. New formal pedestrian crossings would be required
- Will be a need to deliver new pedestrian connections through to Woodside Avenue, Monkland Avenue and Parkview Court
- Concern that vehicles will seek to drop-off and pick-up at these locations rather than travelling into the site from the A806

#### Sustainability

## Opportunities

Linking green habitat corridors remaining could be enhanced.

#### Challenges

- The loss of trees on site would be detrimental to wildlife including bats, invertebrates, birds and potentially badgers and red squirrel. The removal would remove nesting/roosting and foraging habitat
- Trees with bat roost potential present. Some trees will require ground-based and aerial surveys and NatureScot licences and suitable mitigation will be required if a bat roost is identified. Mitigation: Tree survey required to allow design team to review information and consider implications
- Will disconnect a commuting/green corridor for wildlife that is present between the south-east of Lenzie and the north-west.
- This site also connects into two Local Nature Conservation Site Oxgang Woodilee Hospital Woods and Millersneuk Wetland
- Timing of works may be restricted. Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- Mature trees cannot be replaced. Mature woodland block present on the east of the site that would be lost. Loss of woodland would not comply with National or local planning policy (ClydePlan or LDP)
- Ditch runs through the middle of the site- that also will act as a wildlife corridor and may provide hydrological linkage, including to the SUDS pond to the north. A ditch may also run along the east boundary. The draft plan does not look to have given any consideration to hydrology on the site. A hydrological assessment would be required. The ditches could have potential to be used by water voles. Mitigation: Flood Risk Assessment will be required to determine hydrology of site with scope developed alongside EDC Flood Team
- Loss of a community site which is beneficial to allow the community to access nature
- Some potential for badger setts to be present (in woodland on the east side). If present monitoring surveys would be required, timing of works may be restricted, and an artificial sett may be required (as well as a suitable site) if breeding was confirmed and the sett would be destroyed. Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- Japanese knotweed known to be present on site. Mitigation: Ecology survey to determine location and extent. Removal/management strategy to be developed by Contractor
- Potential for adverse impact of LBAP species of plant and habitat suitable for LBAP mammals, birds and invertebrates

#### Logistics

#### Opportunities

Single build, no phasing required

- Scottish Water 6m wide wayleave will impact design and site construction
- Impact on carbon due to peat on site
- Site traffic access due to level change from Initiative Road
- Core path across the site. Mitigation: Core path and public right of way will be suitably reprovided



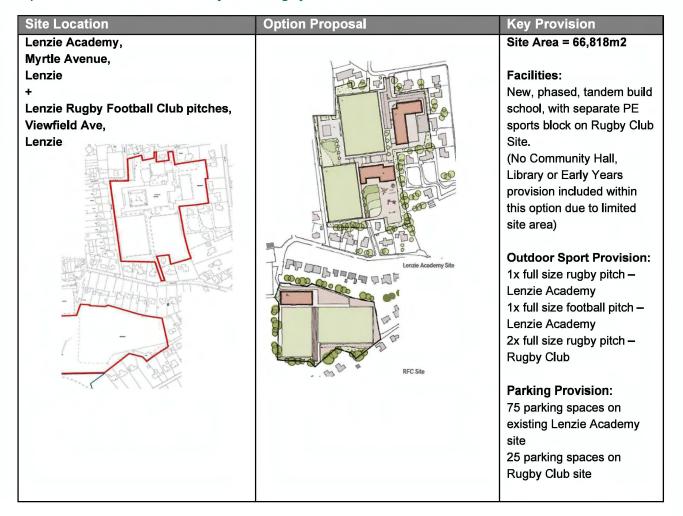




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## Option 4A - Lenzie Academy and Rugby Club Sites



#### Site Analysis

#### Location

#### Opportunities

- Maintains the school within the centre of the community, which reinforces the 'Place Initiative'
- Maintains most of the teaching accommodation on the Lenzie Academy Site established location / familiarity to school and no change to transportation etc. PE facilities located on the Rugby Club site facilitate local community usage of the sports areas outside of school hours (separate site)

- Distance from Lenzie Meadow/Rugby Club if using pitches during tandem build. School timetable, including PE, would need reviewed to accommodate time needed to move from current school building to the rugby club
- Existing kitchen needs maintained as this provides meals to other schools
- Bus pick up to be considered during tandem build. Bus size to be reviewed, potential to use Lenzie Meadow
- Current school lets to be considered
- Impact of COVID 19 on pupils in last few years and potential disruption whilst tandem build ongoing
- Re-housing required for LRFC during construction of the pitches. Alternative pitch provision to be arranged by EDC







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#### Design

#### Opportunities

- Campus arrangement of the school enables the overall impact of the new building mass to be broken down into smaller built forms that are easier to plan based on functionality, orientation, and indoor/outdoor connections.
- Building design with assembly and dining areas located in the north access block encourages community events and social functions
- New build which gives the opportunity to maximise passive design measures through enhanced fabric, passive solar and form factor
- Plant space can be strategically located to suit access, distribution, acoustics
- External pitch provision equal to that which is currently enjoyed by school
- Car parking provision could accommodate 100 spaces between both sites

#### Challenges

- Limited site area to locate the new school buildings on the Lenzie Academy site (tandem build)
- Outdoor space is compromised on the Lenzie Academy site. *Mitigation: use of the Rugby Club site to enhance overall PE outdoor provision. Early consultation with school on timetabling implications if this is the chosen option*
- Two separate school building blocks means more façade heat loss overall therefore additional challenges around fabric performance may be required to achieve LEIP funding.
   Mitigation: Environmental modelling to consider two separate buildings and provide optimum envelope solution
- Level of disruption to the existing school while works are being developed in tandem with the
  existing school still in operation

#### Site Conditions

#### Opportunities

- Site is surrounded by a network of buried and pole mounted BT Openreach infrastructure good potential to achieve LEIP funding digital infrastructure requirement of 1Gbps
- The site seems fairly sheltered from external noise sources which is beneficial from an acoustic perspective
- · Availability of mains water on site to feed new school
- Existing High Voltage (HV) infrastructure available
- Potential for surface water connection to culverted watercourse adjacent to Myrtle Avenue Challenges
- Potential for diversions of existing services to allow existing school to remain live
- Review of whether there is HV on Myrtle Avenue otherwise new HV connection would need
  to be routed from Elm Avenue around existing building to feed new substation. Current utility
  plans show above ground HV however this at odds which what can be seen on the street.
   Mitigation: Utilities survey required to determine existing HV route
- Potential for 2no. substations needed to feed the main site and the Rugby site. Potential to take electrical power from the existing substation to the north of the site. The existing substation has a 500kVA transformer – this is subject to assessment of loads and availability of supply
- Mains water from Viewfield Avenue, however water pipe is a 63mm diameter pipe which would need increased to provide required fire hydrant and water requirements for the PE facilities. Potential disruption on Viewfield Avenue as a result
- Increase in hard standing during construction phase may result in temporary attenuation requirements/enabling phase
- Scottish Water likely to request betterment of surface water discharge rate and treatment to Lenzie Academy site
- SEPA flood maps show flood risk limited to surface water in low spots on site. High risk at Lenzie Moss Boundary. Mitigation: Flood Risk Assessment will be required to determine hydrology of Rugby Club site with scope developed alongside EDC Flood Team
- Drainage ditch present to the west of the playing field boundary.
- Limited access at existing primary school
- Distance of sewer infrastructure may require drainage pumping stations.

## **Planning**

- Existing land use for Lenzie Academy site is established, therefore limited policy conflict with LDP on land use
- Off-site sports provision to serve school which will result in increased flexibility for building design options







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#### Challenges

- Scale of new building on Lenzie Academy site would need careful planning against existing
  housing. Impact of a 3-storey building especially considering the neighbouring residential
  properties, building is reduced to two storeys where practicable to reduce overshadowing.

  Mitigation: building is reduced to two storeys where practicable to reduce
  overshadowing
- Site is located within the Beech Road / Garngaber Avenue Conservation Area and within the Townscape Protection Area, which will have to be considered as part of the design proposals.
- Numerous mature trees within the Lenzie Academy site which will have to be considered (root protection areas etc) Mitigation: Tree survey required to allow design team to review information and consider implications
- The rugby club site is located within the green belt, where there is a presumption against development of buildings, so it is likely this will be considered contrary to LDP Policy 3
- Encroachment into the moss and potential presence of peat will conflict with Planning policy.
   Mitigation: Forthcoming National and Local Policy does not support any proposals which have a negative impact on peatland. Further investigation needed to understand the extent of any peatland. Any impact would require to be mitigated and the wider proposal would need to demonstrate the locational need and essential infrastructure
- Extensive Community engagement process required due to the number of Stakeholders involved

## Traffic Management

## Opportunities

 This option would have a low impact on the access strategy and transport impacts from the school site as the school stays in the same location

#### Challenges

- Important to improve pedestrian linkage between the two sites to cater for increased activity
- Existing Lenzie site has staff access from the north and pupil drop-off / pick up via access from the south. The new concept would be to take all vehicular access from the north via Flm Avenue.
- Consideration of how to cater for drop-off / pick up activity at Rugby club site needed and potential impact on access to Lenzie Meadow Primary school

#### Sustainability

#### Opportunities

 Potential for improvement of both Lenzie Academy and the current rugby pitches (around the edges) through the inclusion of habitat beneficial to wildlife, and the inclusion of bird and bat boxes

#### Challenges

- Care to be taken with drainage to ensure Lenzie Moss is not adversely affected. Mitigation:
   Careful planning of drainage and runoff would be required to ensure that Lenzie Moss bog is not adversely affected
- Bats known to forage on school fields.
- Lighting should be avoided along eastern tree line bordering the site.
- Bat surveys of school would be required with the potential for NatureScot licence to be required and mitigation to be included on school. Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- High potential for water vole within the Rugby Club site with water vole confirmed within the
  adjacent habitat. NatureScot licence will likely be required. Translocation area may be
  required. Mitigation: Preliminary Ecological Assessment required to determine extent
  of surveys and critical timescales

## Logistics

- Limited area for new build development on Lenzie Academy site, likely using both existing pitches, which would be unavailable during construction
- Limited site access. Expectation that Myrtle Avenue would be used for site access, with pupils and staff entering the site from the North at Elm Avenue
- Level of disruption to the existing school while works are being developed in tandem with the
  existing school still in operation
- Logistically difficult to plan given the number of phases required to be able to maintain the
  existing building operational will result in an extended programme of works. Mitigation: Full
  logistics phasing plan to be prepared by Main Contractor and agreed with EDC
  Education





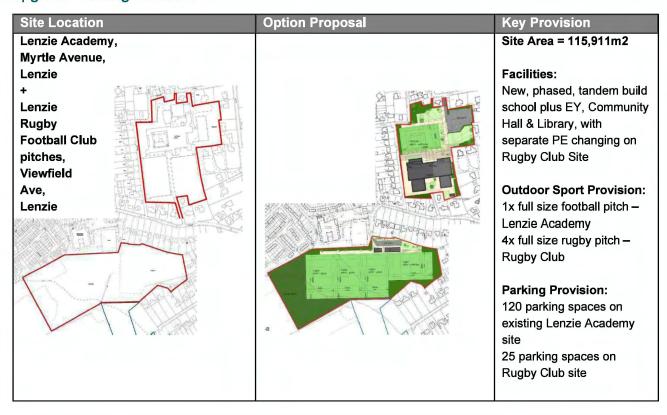


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- Phased tandem build means new substation would need to be built to serve new school while
  existing substation is kept live
- Given site constraints new substation would be needed in advance of new works for temporary power
- Phasing would mean that separate plant provision for heating, hot water, ventilation and power would be required which may increase cost and maintenance requirements
- Site access to Rugby Club from Myrtle Avenue is tight with the location of an existing substation impacting available width

## Option 4B – Existing Lenzie Academy Site – new phased tandem build. Rugby Club Site – upgrade existing facilities.



### Site Analysis

## Location

#### Opportunities

- Maintains the school within the centre of the community, which reinforces the 'Place Initiative'
- Maintains most of the teaching accommodation on the Lenzie Academy Site established location / familiarity to school and no change to transportation etc
- Outdoor space is considerably compromised on Lenzie Academy site and cannot accommodate the required outdoor play provision with space for only one football pitch
- PE facilities located on the Rugby Club site facilitate local community usage of the sports areas outside of school hours (separate site).

- Distance from Lenzie Meadow/Rugby Club if using pitches during tandem build. School timetable, including PE, would need reviewed to accommodate time needed to move from current school building to the rugby club
- Existing kitchen needs maintained as this provides meals to other schools
- Bus pick up to be considered during tandem build. Bus size to be reviewed, potential to use Lenzie Meadow







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- · Current school lets to be considered
- Impact of COVID 19 on pupils in last few years and potential disruption whilst tandem build ongoing
- Re-housing required for LRFC during construction of the pitches. Alternative pitch provision to be arranged by EDC

#### Design

#### Opportunities

- Campus arrangement of the school enables the overall impact of the new building mass to be broken down into smaller built forms that are easier to plan based on functionality, orientation, and indoor/outdoor connections.
- Building design with assembly and dining areas located in the north access block encourages school community events and social functions
- New build which gives the opportunity to maximise passive design measures through enhanced fabric, passive solar and form factor
- · Plant space can be strategically located to suit access, distribution, acoustics
- External pitch provision equal to that which is currently enjoyed by school
- Car parking provision could accommodate 120 spaces at the Lenzie Academy site and 25 at the Rugby Club site

#### Challenges

- Limited site area to locate the new school buildings on the Lenzie Academy site (tandem build)
- Outdoor space is compromised on the Lenzie Academy site. *Mitigation: use of the Rugby Club site to enhance overall PE outdoor provision. Early consultation with school on timetabling implications if this is the chosen option*
- Reduction of available playground and outdoor PE during construction. Mitigation: potential
  to use Rugby Club pitches during construction or alternative EDC facilities which
  pupils can be bused to. Timetabling would need considered
- Level of disruption to the existing school while works are being developed in tandem with the
  existing school still in operation

#### Site Conditions

- Site is surrounded by a network of buried and pole mounted BT Openreach infrastructure good potential to achieve LEIP funding digital infrastructure requirement of 1Gbps
- The site seems fairly sheltered from external noise sources which is beneficial from an acoustic perspective
- Availability of mains water on site to feed new school
- Existing High Voltage (HV) infrastructure available
- Potential for surface water connection to culverted watercourse adjacent to Myrtle Avenue Challenges
- · Potential for diversions of existing services to allow existing school to remain live
- Review of whether there is HV on Myrtle Avenue otherwise new HV connection would need
  to be routed from Elm Avenue around existing building to feed new substation. Current utility
  plans show above ground HV however this at odds which what can be seen on the street.
   Mitigation: Utilities survey required to determine existing HV route
- Potential for 2no. substations needed to feed the main site and the Rugby site. Potential to take electrical power from the existing substation to the north of the site. The existing substation has a 500kVA transformer – this is subject to assessment of loads and availability of supply
- Mains water from Viewfield Avenue, however water pipe is a 63mm diameter pipe which would need increased to provide required fire hydrant and water requirements for the PE facilities. Potential disruption on Viewfield Avenue as a result
- Increase in hard standing during construction phase may result in temporary attenuation requirements/enabling phase
- Scottish Water likely to request betterment of surface water discharge rate and treatment to Lenzie Academy site
- SEPA flood maps show flood risk limited to surface water in low spots on site. High risk at Lenzie Moss Boundary. Mitigation: Flood Risk Assessment will be required to determine hydrology of site with scope developed alongside EDC Flood Team
- Drainage ditch present to the west of the playing field boundary
- · Limited access at existing primary school
- Distance of sewer infrastructure may require drainage pumping stations







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#### Planning

#### Opportunities

- Existing land use for Lenzie Academy site is established, therefore limited policy conflict with
- Will free up more space on the existing site to allow for increased design options. This may be advantageous when considering the interface with adjacent properties at the existing site

#### Challenges

- Scale of new building on Lenzie Academy site would need careful planning against existing housing. Impact of a 3-storey building especially considering the neighbouring residential properties, building is reduced to two storeys where practicable to reduce overshadowing. Mitigation: building is reduced to two storeys where practicable to reduce overshadowing
- Site is located within the Beech Road / Garngaber Avenue Conservation Area and within the Townscape Protection Area
- Numerous mature trees within the Lenzie Academy site which will have to be considered (root protection areas etc) Mitigation: Tree survey required to allow design team to review information and consider implications
- The Rugby Club site is located within the green belt, where there is a presumption against development of buildings, so it is likely this will be considered contrary to LDP Policy 3
- The site encroaches into Lenzie Moss which is a Local Nature Reserve (LNR) and Local Nature and Conservation Site (LNCS) and the lowland raised bog is of national importance
- Habitat surveys would be required to establish the sensitivity of the site. The raised bogs are hydrologically connected habitats, and any development would be required to avoid any damage to any part of this network to avoid degradation of the whole designation. *Mitigation*: Careful planning of drainage and runoff would be required to ensure that Lenzie Moss bog is not adversely affected, and Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- Encroachment into the moss and potential presence of peat will conflict with Planning policy. Mitigation: Forthcoming National and Local Policy does not support any proposals which have a negative impact on peatland. Further investigation needed to understand the extent of any peatland. Any impact would require to be mitigated and the wider proposal would need to demonstrate the locational need and essential infrastructure
- Extensive Community engagement process required due to the number of Stakeholders involved

## Traffic Management

#### Opportunities

This option would have a low impact on the access strategy and transport impacts from the school site as the school stays in the same location

#### Challenges

- Important to improve pedestrian linkage between the two sites to cater for increased activity
- Need to retain drop-off / pick-up facilities for pupils on the existing site
- Consideration of how to cater for drop-off / pick up activity at Rugby club site needed and potential impact on access to Lenzie Meadow Primary school
- The existing access from Myrtle Avenue is very tight and acts as a bottleneck just now Opportunities

#### Sustainability

Potential for improvement of both Lenzie Academy and the current rugby pitches (around the edges) through the inclusion of habitat beneficial to wildlife, and the inclusion of bird and bat boxes

- Care to be taken with drainage to ensure Lenzie Moss is not adversely affected. *Mitigation*: Careful planning of drainage and runoff would be required to ensure that Lenzie Moss bog is not adversely affected
- Bats known to forage on school fields.
- Lighting should be avoided along eastern tree line bordering the site.
- Bat surveys of school would be required with the potential for NatureScot licence to be required and mitigation to be included on school.
- High potential for water vole within the Rugby Club site with water vole confirmed within the adjacent habitat. NatureScot licence will likely be required. Translocation area may be required. Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales







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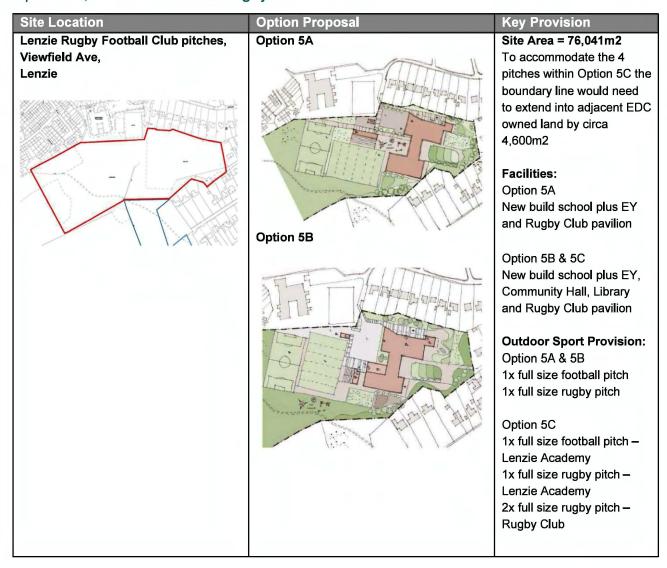


#### Logistics

#### Challenges

- Limited area for new build development on Lenzie Academy site, likely using both existing pitches, which would be unavailable during construction
- Limited site access. Expectation that Myrtle Avenue would be used for site access, with pupils and staff entering the site from the North at Elm Avenue
- Level of disruption to the existing school while works are being developed in tandem with the
  existing school still in operation
- Logistically difficult to plan given the number of phases required to be able to maintain the
  existing building operational will result in an extended programme of works. Mitigation: Full
  logistics phasing plan to be prepared by Main Contractor and agreed with EDC
  Education
- Phased tandem build means new substation would need to be built to serve new school while
  existing substation is kept live
- Given site constraints new substation would be needed in advance of new works for temporary power
- Phasing would mean that separate plant provision for heating, hot water, ventilation and power would be required which may increase cost and maintenance requirements
- Site access to Rugby Club from Myrtle Avenue is tight with the location of an existing substation impacting available width

## Option 5A, 5B & 5C – Lenzie Rugby Club Site





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Parking Provision: 120 parking spaces for school + additional 25 parking spaces

## Site Analysis

#### Location

#### Opportunities

- School still maintained within the centre of the community, which reinforces the 'Place Initiative'
- Simple tandem build option with no disruption to the school during construction
- Forges a strong link with Lenzie Meadow
- Community Centre, Library, Early Years Centre and replacement Rugby Club pavilion will enhance the links to the community and facilitate sharing the use facilities

#### Challenges

- Restricted access into site, which will need careful modelling and resolution
- Re-housing required for LRFC during construction of the pitches. Alternative pitch provision to be arranged by EDC

#### Design

#### Opportunities

- Ample site, with opportunity to explore optimum orientation and building form factor
- Opportunity to move building away from neighbouring housing, allowing for a taller building with reduced footprint, leading to improved energy performance
- New build which gives the opportunity to maximise passive design measures through enhanced fabric, passive solar and form factor
- Single school building form will improve departmental connections
- Building design with assembly and dining areas located at the heart of the plan and connected to the main entrance concourse encourages school community events and social functions
- Plant space can be strategically located to suit access, distribution, acoustics
- External pitch provision equal to that which is currently enjoyed by school
- Car parking provision could accommodate 120 spaces for school with an additional 25 for community

#### Challenges

- Proximity of external plant to existing dwellings will be important for acoustics. Mitigation:
   Noise survey required to determine optimum location
- Shared campus will require additional metering to ensure that the school facilities can be extracted from the community facilities for LEIP funding purposes.
- It is likely that the fabric performance standards for the Community Hall, Library and Early Years would need to be the same as the school which may be over and above what they would be expecting

#### Site Conditions

- Site is surrounded by a network of buried and pole mounted BT Openreach infrastructure –
  good potential to achieve LEIP funding digital infrastructure requirement of 1Gbps
- The site seems fairly sheltered from external noise sources which is beneficial from an acoustic perspective
- · Availability of mains water on site to feed new school







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#### Challenges

- Location of existing sub-station outside Lenzie Meadow may need relocated to allow access to site
- Mains water from Viewfield Avenue, however water pipe is a 63mm diameter pipe which would need increased to provide required fire hydrant and water requirements for the PE facilities. Potential disruption on Viewfield Avenue as a result
- Increase in hard standing during construction phase may result in temporary attenuation requirements/enabling phase
- SEPA flood maps show flood risk limited to surface water in low spots on site. High risk at Lenzie Moss Boundary. Mitigation: Flood Risk Assessment will be required to determine hydrology of site with scope developed alongside EDC Flood Team
- Drainage ditch present to the west of the playing field boundary
- Limited access at existing primary school
- Distance of sewer infrastructure may require drainage pumping stations

#### **Planning**

#### Opportunities

- Sustainable and accessible location within Lenzie
- Provides the opportunity to create a 'campus' of civic buildings

#### Challenges

- The Rugby Club site is located within the green belt, where there is a presumption against development of buildings, so it is likely this will be considered contrary to LDP Policy 3
- The site encroaches into Lenzie Moss which is a Local Nature Reserve (LNR) and Local Nature and Conservation Site (LNCS) and the lowland raised bog is of national importance
- Habitat surveys would be required to establish the sensitivity of the site. The raised bogs are
  hydrologically connected habitats, and any development would be required to avoid any
  damage to any part of this network to avoid degradation of the whole designation. Mitigation:
  Careful planning of drainage and runoff would be required to ensure that Lenzie Moss
  bog is not adversely affected, and Preliminary Ecological Assessment required to
  determine extent of surveys and critical timescales
- Designated open space (LDP Policy 7) and any loss of pitches will be required to be reprovided
- Extensive Community engagement process required due to the number of Stakeholders involved
- Access options to the site are to be considered against land ownership
- Encroachment into the moss and potential presence of peat will conflict with Planning policy.
   Mitigation: Forthcoming National and Local Policy does not support any proposals
   which have a negative impact on peatland. Further investigation needed to understand
   the extent of any peatland. Any impact would require to be mitigated and the wider
   proposal would need to demonstrate the locational need and essential infrastructure.

## Traffic Management

#### Opportunities

 School would not be relocating far so wider transport impacts will be limited although need to address local impacts

#### Challenges

- The existing access from Myrtle Avenue is very tight and acts as a bottleneck just now.
   There will be a need to realign and widen the access considerably if it is to be used to access a new secondary school. May require third party land
- Vital that an on-site drop-off / pick-up facility is provided on site to prevent all such activity occurring on Myrtle Avenue and Moss Road
- Need to be able to accommodate buses and coaches on site as well as service vehicles so
  existing primary school access needs to be altered to accommodate the swept paths of such
  vehicles
- Need to provide pedestrian route to the east via Viewfield Avenue as well as a route to the west if possible

#### Sustainability

- Loss of valuable habitat for: birds, invertebrates, bats, amphibians, reptiles and potentially badgers and red squirrel
- Potential for bat roosts in rugby club building
- Potential for a higher level of survey and mitigation required such as tree climbing, bat activity transects, reptile and amphibian refuge surveys and potentially translocation – a suitable site would have to be identified for translocation. Water vole confirmed within the site.







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NatureScot licence would be required and a separate translocation site. *Mitigation:*Preliminary Ecological Assessment required to determine extent of surveys and critical timescales

- Potential restrictions to timing of works depending on construction programme and season for nesting birds, protected species etc. Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- Potential for badger setts to be present. If present monitoring surveys would be required, timing of works may be restricted, and an artificial sett (along with a suitable site) may be required if breeding was confirmed and the sett would be destroyed. Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- It would not be possible to mitigate for the loss of this habitat (western part of the site).
- Likely large loss of biodiversity
- Nature Conservation (Scotland) Act 2004 also for the first time placed a statutory duty on public bodies to conserve biodiversity while carrying out their normal functions
- Aims for ecosystem restoration
   Scottish Biodiversity Strategy
- Aims for quality greenspace for health and educational benefits. Aims to halt the loss of biodiversity – Scottish Biodiversity Strategy
- Development that affects a Local Nature Reserve or Local Nature Conservation Site will only
  be permitted where the overall ecological value; the maintenance of a healthy ecosystem and
  the opportunities for learning and enjoyment of the site are not compromised. Development
  should conserve and enhance locally designated sites to maintain and improve their
  ecological and learning value Local Development Plan
- Local priority species and habitats, Ancient semi-natural woodlands, hedgerows and significant trees, including those covered by Tree Preservation Orders, Existing habitat networks, - Local Development Plan
- Potential for adverse impact on Scottish Government Priority habitat Peatland/lowland raised bog/species rich grassland (survey required to confirm habitats present). Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- Potential for adverse impact of LBAP species of plant and habitat suitable for LBAP mammals, birds and invertebrates
- Bog habitat is a rainfed habitat, so it is important that there is no water input from the site or
  increased drainage from Lenzie Moss. Mitigation: Careful planning of drainage and runoff
  would be required to ensure that Lenzie Moss bog is not adversely affected
- There is potential for moderate to high ground water dependant terrestrial ecosystems to be present on the western part of the site which could be affected if the development disrupts the waterflow in the area. *Mitigation: Hydrological surveys would be required*
- Runoff and dust from the construction works has the potential to adversely affect the habitat present in Lenzie Moss. *Mitigation: Construction management plan to inform dust* management.
- Potential for loss of rare plant species such as bog rosemary
- Western part of the site currently managed by Friends of Lenzie Moss and the community
  path around Lenzie Moss appears to pass through the proposed site boundary potentially
  blocking the circular route. Mitigation: Core path and public right of way will be suitably
  reprovided to avoid desire lines
- Potential for peat to be present on the western part of the site. If peat is present an
  appropriate method of work would be required to store and if possible, reuse on site or to be
  disposed of in an appropriate manner due to it being classed as waste by law. Excavation of
  peat will result in a large carbon loss
- Potential dangers if children go onto the bog. *Mitigation: Secure school boundary to prevent unsupervised access to the Moss*
- Care would be required in the choice of species used for landscaping to avoid the risk of unwanted species colonising the bog
- New pitches unlikely to have pitch lighting due to proximity to Lenzie Moss Opportunities

#### Logistics

## Disruption to pupils mitigated during build process

- Single build, no phasing required
- Adequate site area to potentially complete pitches ahead of school build to allow growing season to start sooner







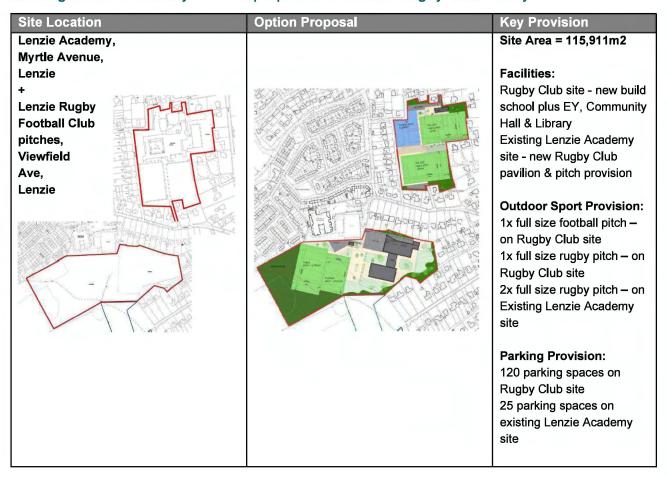
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### Challenges

- Site access to Rugby Club from Myrtle Avenue is tight with the location of an existing substation impacting available width
- Right of way route across the site would need reviewed. Mitigation: Core path and public right of way will be suitably reprovided

Option 5D – Current Lenzie Rugby Club Site – new build school and community facilities. Existing Lenzie Academy Site – repurposed as Lenzie Rugby Club facility.



## Site Analysis

#### Location

#### Opportunities

- School still maintained within the centre of the community, which reinforces the 'Place Initiative'
- Simple tandem build option with no disruption to the school during construction
- Forges a strong link with Lenzie Meadow
- Community Centre, Library, Early Years Centre will enhance the links to the community and facilitate sharing the use facilities
- Separate Rugby Club provision on existing Lenzie Academy site will ensure green, open space area maintained within local area

- Restricted access into Rugby Club site, which will need careful modelling and resolution
- Re-housing required for LRFC during construction of the pitches. Alternative pitch provision to be arranged by EDC







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#### Design

#### Opportunities

- Ample area on Rugby Club site, with opportunity to explore optimum orientation and building form factor
- Opportunity to move building away from neighbouring housing, allowing for a taller building with reduced footprint, leading to improved energy performance
- New build which gives the opportunity to maximise passive design measures through enhanced fabric, passive solar and form factor
- Single school building form will improve departmental connections
- Building design with assembly and dining areas located at the heart of the plan and connected to the main entrance concourse encourages school community events and social functions
- Plant space can be strategically located to suit access, distribution, acoustics
- · External pitch provision equal to that which is currently enjoyed by school
- Car parking provision could accommodate 120 spaces for school with an additional 25 for community. Rugby Club on existing Lenzie Academy site can accommodate 25 spaces

#### Challenges

- Proximity of external plant to existing dwellings will be important for acoustics. Mitigation:
   Noise survey required to determine optimum location
- Shared campus will require additional metering to ensure that the school facilities can be extracted from community facilities for LEIP funding purposes.
- It is likely that the fabric performance standards for the Community Hall, Library and Early Years would need to be the same as the school which may be over and above what they would be expecting

#### Site Conditions

#### Opportunities

- Site is surrounded by a network of buried and pole mounted BT Openreach infrastructure –
  good potential to achieve LEIP funding digital infrastructure requirement of 1Gbps
- The site seems fairly sheltered from external noise sources which is beneficial from an acoustic perspective
- Availability of mains water on site to feed new school

#### Challenges

- Location of existing sub-station outside Lenzie Meadow may need relocated to allow access to site
- Mains water from Viewfield Avenue, however water pipe is a 63mm diameter pipe which
  would need increased to provide required fire hydrant and water requirements for the PE
  facilities. Potential disruption on Viewfield Avenue as a result
- Increase in hard standing during construction phase may result in temporary attenuation requirements/enabling phase
- SEPA flood maps show flood risk limited to surface water in low spots on site. High risk at Lenzie Moss Boundary. Mitigation: Flood Risk Assessment will be required to determine hydrology of site with scope developed alongside EDC Flood Team
- Drainage ditch present to the west of the playing field boundary
- Limited access at existing primary school
- Distance of sewer infrastructure may require drainage pumping stations

#### Planning

#### Opportunities

- Sustainable and accessible location within Lenzie
- Provides the opportunity to create a 'campus' of civic buildings

- The Rugby Club site is located within the green belt, where there is a presumption against development of buildings, so it is likely this will be considered contrary to LDP Policy 3
- The site encroaches into Lenzie Moss which is a Local Nature Reserve (LNR) and Local Nature and Conservation Site (LNCS) and the lowland raised bog is of national importance
- Habitat surveys would be required to establish the sensitivity of the site. The raised bogs are
  hydrologically connected habitats, and any development would be required to avoid any
  damage to any part of this network to avoid degradation of the whole designation. Mitigation:
  Careful planning of drainage and runoff would be required to ensure that Lenzie Moss
  bog is not adversely affected, and Preliminary Ecological Assessment required to
  determine extent of surveys and critical timescales
- Designated open space (LDP Policy 7) and any loss of pitches will be required to be reprovided







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- Extensive Community engagement process required due to the number of Stakeholders involved
- Access options to the site are to be considered against land ownership
- Encroachment into the moss and potential presence of peat will conflict with Planning policy.
   Mitigation: Forthcoming National and Local Policy does not support any proposals which have a negative impact on peatland. Further investigation needed to understand the extent of any peatland. Any impact would require to be mitigated and the wider proposal would need to demonstrate the locational need and essential infrastructure

## Traffic Management

#### Opportunities

 School would not be relocating far so wider transport impacts will be limited although need to address local impacts

#### Challenges

- The existing access from Myrtle Avenue is very tight and acts as a bottleneck just now.
   There will be a need to realign and widen the access considerably if it is to be used to access a new secondary school. May require third party land
- Vital that an on-site drop-off / pick-up facility is provided on site to prevent all such activity occurring on Myrtle Avenue and Moss Road
- Need to be able to accommodate buses and coaches on site as well as service vehicles so
  existing primary school access needs to be altered to accommodate the swept paths of such
  vehicles
- Need to provide pedestrian route to the east via Viewfield Avenue as well as a route to the west if possible

#### Sustainability

- Loss of valuable habitat for: birds, invertebrates, bats, amphibians, reptiles and potentially badgers and red squirrel
- · Potential for bat roosts in rugby club building
- Potential for a higher level of survey and mitigation required such as tree climbing, bat activity transects, reptile and amphibian refuge surveys and potentially translocation a suitable site would have to be identified for translocation. Water vole confirmed within the site.
   NatureScot licence would be required and a separate translocation site. Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- Potential restrictions to timing of works depending on construction programme and season for nesting birds, protected species etc. Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- Potential for badger setts to be present. If present monitoring surveys would be required, timing of works may be restricted, and an artificial sett (along with a suitable site) may be required if breeding was confirmed and the sett would be destroyed. Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- It would not be possible to mitigate for the loss of this habitat (western part of the site).
- Likely large loss of biodiversity
- Nature Conservation (Scotland) Act 2004 also for the first time placed a statutory duty on public bodies to conserve biodiversity while carrying out their normal functions
- Aims for ecosystem restoration- Scottish Biodiversity Strategy
- Aims for quality greenspace for health and educational benefits. Aims to halt the loss of biodiversity – Scottish Biodiversity Strategy
- Development that affects a Local Nature Reserve or Local Nature Conservation Site will only
  be permitted where the overall ecological value; the maintenance of a healthy ecosystem and
  the opportunities for learning and enjoyment of the site are not compromised. Development
  should conserve and enhance locally designated sites to maintain and improve their
  ecological and learning value Local Development Plan
- Local priority species and habitats, Ancient semi-natural woodlands, hedgerows and significant trees, including those covered by Tree Preservation Orders, Existing habitat networks, - Local Development Plan
- Potential for adverse impact on Scottish Government Priority habitat Peatland/lowland raised bog/species rich grassland (survey required to confirm habitats present). Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales
- Potential for adverse impact of LBAP species of plant and habitat suitable for LBAP mammals, birds and invertebrates







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- Bog habitat is a rainfed habitat, so it is important that there is no water input from the site or
  increased drainage from Lenzie Moss. Mitigation: Careful planning of drainage and runoff
  would be required to ensure that Lenzie Moss bog is not adversely affected
- There is potential for moderate to high ground water dependant terrestrial ecosystems to be
  present on the western part of the site which could be affected if the development disrupts
  the waterflow in the area. Mitigation: Hydrological surveys would be required
- Runoff and dust from the construction works has the potential to adversely affect the habitat present in Lenzie Moss. *Mitigation: Construction management plan to inform dust* management.
- · Potential for loss of rare plant species such as bog rosemary
- Western part of the site currently managed by Friends of Lenzie Moss and the community
  path around Lenzie Moss appears to pass through the proposed site boundary potentially
  blocking the circular route. Mitigation: Core path and public right of way will be suitably
  reprovided to avoid desire lines
- Potential for peat to be present on the western part of the site. If peat is present an
  appropriate method of work would be required to store and if possible, reuse on site or to be
  disposed of in an appropriate manner due to it being classed as waste by law. Excavation of
  peat will result in a large carbon loss
- Potential dangers if children go onto the bog. *Mitigation: Secure school boundary to prevent unsupervised access to the Moss*
- Care would be required in the choice of species used for landscaping to avoid the risk of unwanted species colonising the bog
- New pitches unlikely to have pitch lighting due to proximity to Lenzie Moss Opportunities

## Logistics

## Disruption to pupils mitigated during build process

- Single build, no phasing required
- Adequate site area to potentially complete pitches ahead of school build to allow growing season to start sooner

- Site access to Rugby Club from Myrtle Avenue is tight with the location of an existing substation impacting available width
- Right of way route across the site would need reviewed. Mitigation: Core path and public right of way will be suitably reprovided



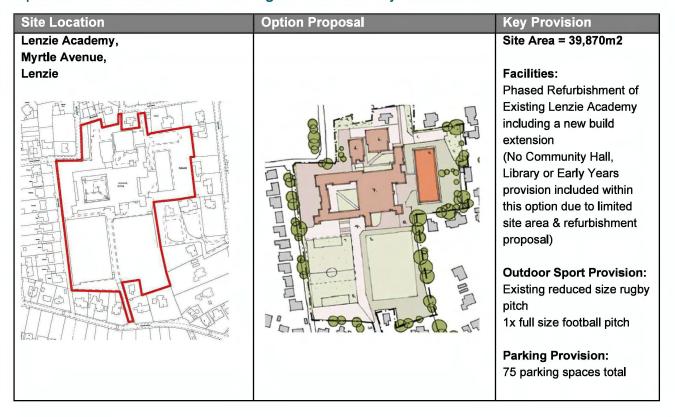




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## Option 6 - Refurbishment of Existing Lenzie Academy



## Site Analysis

#### Location

#### Opportunities

- Maintains the school within the centre of the community, which reinforces the 'Place Initiative'
- Maintains all teaching accommodation on the Lenzie Academy Site established location / familiarity to school and no change to transportation etc.

#### Challenges

- Disruption to continuity due to the various phases and moving of pupils to decant facility etc.
- Finished building and accommodation won't be equivalent to a new build facility that other schools are benefiting from
- Loss of football pitch due to decant facility. Distance from Lenzie Meadow/Rugby Club if
  using pitches during phased refurbishment or alternative EDC facilities which pupils can be
  bused to. PE timetable would need reviewed to accommodate this
- Impact of COVID 19 on pupils in last few years and potential disruption whilst tandem build going
- Available site area is too small to meet the School Premises Act regulation especially on outdoor sports provision. Consideration to be given to supplement this through continued shared use of the rugby club site

#### Design

#### Opportunities

Use of existing thermal mass as a passive cooling solution to reduce overheating potential

- Disabled access limited within existing school due to location of only 2No. lifts and various level changes throughout the building
- Level of disruption to the existing school while works are being developed in tandem with the
  existing school still in operation
- Design life to be considered for refurbishment
- Large decant temporary accommodation is required to enable refurbishment phases to be planned







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- · Reduction of available playground space during construction
- Unknown status of fabric and services due to lack of intrusive surveys
- Extent of fabric upgrades has the potential to be more costly and to require prolonged programmes if compared with simple newbuild options
- The available built spaces limit plan arrangement, departmental connections, and community
  access.
- Car park spaces remain as per the current provision. *Mitigation: Opportunity to look at reduced parking spaces due to existing sustainable transport options available within the vicinity of the site*
- Existing fabric U-value and air tightness to achieve 100% LEIP Funding Energy Targets of 67-83kWh/m2 would be compromised. Mitigation: LEIP target to be discussed with EDC, potential to reduce target and achieve a lower percentage of LEIP funding
- Existing low floor to ceiling and deep plan classrooms results in some areas results in poor natural daylight levels – increased energy from artificial lighting
- Current problems with the school layout would need to be considered to meet staff and pupil
  expectations of a new school facility.
- Main issues which would be difficult to alter are narrow corridor widths which make pupils
  feel unsafe, unsupervised void areas, location of departments too far apart, access to library
  is only via stairs
- Extensive refurbishment of internal spaces to address further issues such as access to some staff areas only via classrooms, access to Games Hall only via changing rooms, dining space can't accommodate the required numbers, not enough space provision for alternative assessment for ASN cohort
- Potential significant concrete repairs to exposed concrete columns around perimeter

  Opportunities

## Site Conditions

## Opportunities

· Availability of mains water on site

#### Challenges

- Complex services distribution within existing building which would potentially cause increased design and installation time
- Potential for complex phasing and temporary services diversions to keep existing areas operating during refurbishment
- Existing building uses gas and biomass which would go against the Scottish Government's drive to remove fossil fuels by 2045
- Potential for utilities diversions to suit refurbishment and extension
- Potential that extension if greater than 25% of the existing building we may need to consider electric ASHP heating in line with new Section 6 regulations (if applicable for the time of warrant submission). Potential mismatch of systems would be increase FM requirements for maintenance
- Scottish Water potential to request betterment of surface water discharge rate and treatment as part of planning submission
- Site within Coal Authority reporting area

## **Planning**

## Opportunities

Existing land use is established, therefore limited policy conflict with LDP

## Traffic Management

#### Opportunities

- This option would have the least impact on the access strategy and transport impacts from the school site
- Opportunity to introduce new Travel Plan at the refurbished site to encourage more travel by sustainable modes

### Challenges

Opportunities

- EDC Transportation would look for any existing problems at the school (parking, drop-off arrangements etc) to be addressed as part of any planning application
- Construction traffic will need to be carefully managed

## Sustainability

- Minimal effects to ecology likely only bat /nesting bird surveys required
- Potential to improve the site for wildlife through the inclusion of trees, hedges, beneficial shrubs and wildflowers, and the inclusion of bird and bat boxes







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#### Challenges

 Bat/ nesting bird surveys of school would be required with the potential for NatureScot licence to be required and mitigation to be included on school

## Logistics

- Temporary decant facility would be installed on existing football pitch reducing pitch provision during refurbishment
- Limited site availability for Contractor compound and parking, site access limited
- · Separation between site works and pupil access / egress to decant facility
- Multiple decant phases required to move pupils to temporary facility, demolish existing east teaching block, build new teaching block, decant pupils again while extensive refurbishment of existing building and sports facilities progress.
- Logistically difficult to plan given the number of phases required which will result in an
  extended programme of works. Mitigation: Full logistics phasing plan to be prepared by
  Main Contractor and agreed with EDC Education
- Given site constraints new substation would be needed in advance of new works for temporary power
- Phasing would mean that separate plant provision for heating, hot water, ventilation and power would be required to temporary decant facility which may increase cost and maintenance requirements

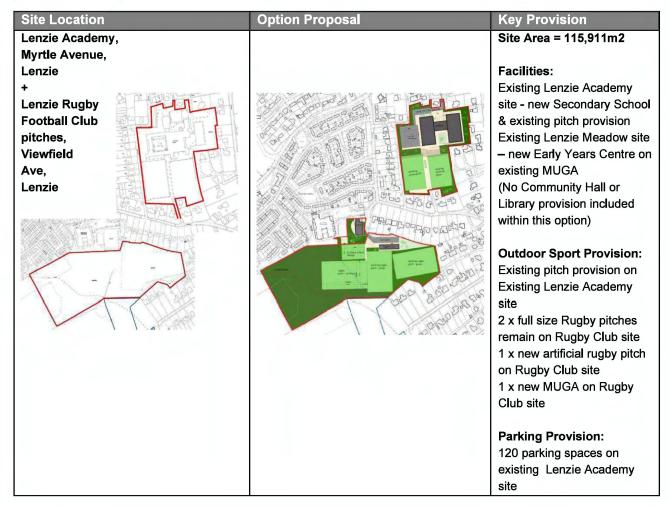




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Option 7 – Current Lenzie Rugby Club Site – new build school (no community facilities). Existing Lenzie Academy Site – Lenzie Meadow MUGA, expanded outdoor provision & 3G Rugby pitch for Lenzie Rugby Club. Existing Lenzie Meadow – new Early Years Centre on existing MUGA location. Refurbishment of existing Lenzie Meadow Early Years area to provide Primary School classrooms.



## Site Analysis

#### Location

## Opportunities

- Maintains the school within the centre of the community, which reinforces the 'Place Initiative'
- Maintains all teaching accommodation on the Lenzie Academy Site established location / familiarity to school and no change to transportation etc.

- PE use of Rugby Club pitches to be confirmed while school is located on the Rugby Club site in the temporary modular accommodation
- Existing kitchen provides meals to other schools, EDC FM and Education to be consulted on provision requirement
- Vehicular access to serve temporary modular accommodation to be considered. Mitigation:
   Traffic Management Plan to be prepared
- Bus pick up to be considered while school is located on the Rugby Club site in the temporary modular accommodation, use of Lenzie Meadow pick-up / drop-off
- · Current school lets to be considered







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 Impact of COVID 19 on pupils in last few years and potential disruption whilst tandem build ongoing

#### Design

## Opportunities

- New build which gives the opportunity to maximise passive design measures through enhanced fabric, passive solar and form factor (Secondary School & Early Years Centre)
- · Single secondary school building form will improve departmental connections
- Building design with assembly and dining areas located at the heart of the plan and connected to the main entrance concourse encourages community events and social functions
- Plant space can be strategically located to suit access, distribution, acoustics
- External pitch provision equal to that which is currently enjoyed by school
- Car parking provision could accommodate 120 spaces

#### Challenges

- Limited area at Lenzie Academy site to locate the new school building if the existing pitch provision should remain
- Separate Early Years Centre so no opportunity for co-location
- No community facilities; limited opportunity for co-located services

#### Site Conditions

#### Opportunities

- Existing Lenzie Academy site is surrounded by a network of buried and pole mounted BT Openreach infrastructure – good potential to achieve LEIP funding digital infrastructure requirement of 1Gbps
- The site is sheltered from external noise sources which is beneficial from an acoustic perspective Mitigation: Noise survey required to determine final window design
- · Availability of mains water on site to feed new school
- Existing High Voltage (HV) infrastructure available
- Potential for surface water connection to culverted watercourse adjacent to Myrtle Avenue

#### Challenges

- Risk: No Site Investigation, Topographical or GPR surveys have been carried out due to the
  existing site being operational and separate landowners for the Rugby Club
- New services required for the temporary modular accommodation at the rugby club site
- Extent of modular accommodation may require deep foundation trenches or piling.
- May require some regrading works to address change in levels between 3G pitch and proposed location of the temporary modular accommodation. Potential requirement for significant regrading to address levels.
- Right of way route across the site would need reviewed. Mitigation: Public right of way will be suitably reprovided
- Review of whether there is HV on Myrtle Avenue otherwise new HV connection would need
  to be routed from Elm Avenue around existing building to feed new substation. Current utility
  plans show above ground HV however this at odds which what can be seen on the street.
   Mitigation: Utilities survey required to determine existing HV route
- Scottish Water likely to request betterment of surface water discharge rate and treatment
- · Site within Coal Authority reporting area
- SEPA flood maps show high flood risk at Lenzie Moss Boundary where temporary modular accommodation will be located. Mitigation: Flood Risk Assessment will be required to determine hydrology of site with scope developed alongside EDC Flood Team

#### Planning

#### Opportunities

 Existing land use is established at Lenzie Academy site, therefore limited policy conflict with LDP

- Scale of new building would need careful planning against existing housing. Impact of a 3storey building especially considering the neighbouring residential properties. Mitigation: building is reduced to two storeys where practicable to reduce overshadowing
- Site is located within the Beech Road / Garngaber Avenue Conservation Area and within the Townscape Protection Area
- Numerous mature trees within the site which will have to be considered (root protection areas etc) Mitigation: Tree survey required to allow design team to review information and consider implications
- Additional planning application required for the temporary modular accommodation. Given size of the development likely to be another major application. Most of the same constraints







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- still apply, with building footprint further into the Lenzie Moss, which may further disturb any occurrence of peat in the Moss, if present
- Combined with major application for the tandem build, this may create significant risk of delay within preconstruction programme
- Significant public consultation and support required for both planning applications
- The new Artificial pitch requires a deep ground build up. The extent of civil engineering into the moss may create significant concerns with planners. Other options with grass pitches may be considered a less intrusive form of works.
- Extensive Community engagement process required due to the number of Stakeholders involved

## Traffic Management

#### Opportunities

Existing site so no major issues anticipated with regard to wider traffic impacts

## Challenges

- Existing Lenzie site has staff access from the north and pupil drop-off / pick up via access from the south. The new concept for the Secondary School would be to take all vehicular access from the north via Elm Avenue, pedestrian only from the south via Myrtle Avenue.
- Construction traffic will need to be carefully managed during construction of temporary modular accommodation, during construction of the Secondary School and again during the construction of the new Early Years Centre due to proximity of Lenzie Meadow Primary

#### Sustainability

#### Opportunities

 Potential to improve the existing Lenzie Academy site for ecology through the inclusion of habitat for wildlife such as trees, hedges, and wildflowers as well as boxes for bats and birds. Potential to create habitat features such as green roofs, water features and nature immersion sites for children

#### Challenges

- Ecological issues remain, although the temporary modular accommodation moving further into the Moss may result in adverse impact to ecological habitat.
- · New 3G pitch unlikely to have pitch lighting due to proximity to Lenzie Moss
- All comments as per options 5A, 5B & 5C above, water voles have been detected adjacent to the proposed location of the temporary modular accommodation, translocation site would be required
- Bat surveys of existing Lenzie Academy buildings and any trees that will be required. Potential for NatureScot licence to be required if a bat roost is present and mitigation to be included in the new school
- Potential for nesting birds in existing buildings could be timing restrictions with demolition works Mitigation: Preliminary Ecological Assessment required to determine extent of surveys and critical timescales

### Logistics

- Potentially 6 or 7 phases required which will extend the construction programme of works.
   Mitigation: Full logistics phasing plan to be prepared by Main Contractor and agreed with EDC Education
- Use of existing Lenzie Academy football pitch for Contractors compound, existing pitch will need reinstated before completion
- New substation would be needed in advance of temporary modular accommodation for temporary power
- Consideration to be given to installation and removal of temporary modular classrooms as these sit deeper into the Rugby Club site
- Footprint for Early Years Centre will be required early to enable access to installation of modular accommodation
- If Early Years Centre construction is sequenced after modular accommodation installation the
  part of the Rugby playing field may be required to be used for access road to remove the
  cabins. May require formation of temporary road, as part of external works to form the
  artificial pitch once modular accommodation is removed





