

DATA LABEL: PUBLIC



## **COUNCIL EXECUTIVE**

### **REINFORCED AUTOCLAVED AERATED CONCRETE ROOFS UPDATE**

#### **REPORT BY HEAD OF FINANCE AND PROPERTY SERVICES**

##### **A. PURPOSE OF REPORT**

The purpose of this report is to provide an update to Council Executive on the properties within the council's estate that have roofs planks constructed using Reinforced Autoclaved Aerated Concrete (RAAC).

##### **B. RECOMMENDATION**

It is recommended that Council Executive:

1. Notes that there are nine properties identified as having roofs constructed using Reinforced Autoclaved Aerated Concrete (RAAC) roof planks);
2. Notes that the RAAC roof planks at Fauldhouse Partnership Centre Sports Hall have serious structural issues that have resulted in the temporary closure of the Sports Hall;
3. Approves progressing with the replacement of the RAAC roof at Fauldhouse Partnership Centre at a cost of £720,000;
4. Notes that funding is in place to replace the RAAC roofs at The Lanthorn Centre, Whitburn Partnership Centre and Balbardie Primary School;
5. Notes that further investigation will be carried out in relation to St Kentigerns Academy and Stoneyburn Community Centre and updates will be presented to Council Executive on the position at each site;
6. Notes comprehensive management and regular inspection arrangements are in place for properties which have been identified independently as not at risk of immediate failure; and
7. Notes that the Head of Finance and Property Services has delegated authority to undertake urgent or emergency works to stabilise RAAC roofs should issues arise.

##### **C. SUMMARY OF IMPLICATIONS**

|           |  |   |
|-----------|--|---|
| <b>I</b>  | <b>Council Values</b>                                      | Focusing on our customers' needs; being honest, open and accountable; making best use of our resources. |
| <b>II</b> | <b>Policy and Legal (including Strategic Environmental</b> | Risk assessments have been undertaken for properties where RAAC roofs may be present                    |

|             |  |   |
|-------------|--|---|
|             | <b>Assessment, Equality Issues, Health or Risk Assessment)</b> | and where RAAC has been identified action has been taken to reduce or mitigate these risks.   |
| <b>III</b>  | <b>Implications for Scheme of Delegations to Officers</b>      | The Head of Finance and Property Services has delegated authority to undertake urgent or emergency works to stabilise RAAC roofs should issues arise.   |
| <b>IV</b>   | <b>Impact on performance and performance Indicators</b>        | Ensuring property assets are safe (compliance), are in satisfactory condition and available for use (utilisation) are performance measures that will updated accordingly.   |
| <b>V</b>    | <b>Relevance to Single Outcome Agreement</b>                   | We make the most efficient and effective use of resources by minimising our impact on the built and natural environment.  |
| <b>VI</b>   | <b>Resources - (Financial, Staffing and Property)</b>          | <p>The General Services Capital Programme 2022/23 to 2027/28 contains budget provision for works at Whitburn Community Education Centre, The Lanthorn Community Centre and Balbardie Primary School.</p> <p>The proposed works at Fauldhouse Partnership Centre have been estimated at £720,000. It is proposed that the cost is funded from one off resources arising from a change in accounting rules relating to service concessions/PPP contracts.</p> |
| <b>VII</b>  | <b>Consideration at PDSP</b>                                   | None.   |
| <b>VIII</b> | <b>Other consultations</b>                                     | Consultations and engagement with Education Services, management committees and other services impacted by the presence of RAAC roofs has been undertaken and will continue.  |

## **D. TERMS OF REPORT**

### **D.1. Reinforced Autoclaved Aerated (RAAC) Roofs**

As reported to Council Executive on 22 June 2021, Reinforced Autoclaved Aerated Concrete (RAAC), often referred to as Siporex, is a lightweight construction material that was commonly used in construction between the 1960s and 1980s. Although, the use of RAAC for construction of new buildings was discontinued in the late 1980s, it is still found in many buildings across the United Kingdom.

In 2019, guidance issued identified the disadvantages outlined with RAAC roofs and warned of potential immediate structural failure in certain circumstances. The guidance further confirmed that roof decks constructed using RAAC planks will have reached the end of their theoretical lifespan and robust management arrangements are required to regularly inspect for deterioration, particularly around plank supports.

Following on from the report in June 2021, this report provides a further update on the status of the properties that have RAAC roofs and outlines the ongoing approach that officers are taking. The report also recommends actions required at Fauldhouse Partnership Centre where the condition of the RAAC planks has been identified as deteriorated following a recent structural inspection.

## **D.2. Properties Identified with RAAC Roofs**

As reported in June 2021, the properties where RAAC roofs were identified are as follows:

1. Knightsridge Primary School, Livingston
2. Windyknowe Primary School, Bathgate
3. Riverside Primary School, Livingston
4. Whitburn Community Education Centre, Whitburn
5. The Lanthorn Centre, Livingston
6. Balbardie Primary School, Bathgate
7. Stoneyburn Community Education Centre, Stoneyburn
8. Fauldhouse Partnership Centre, Fauldhouse
9. St Kentigerns Academy, Blackburn

## **D.3. Fauldhouse Partnership Centre Remedial Works**

RAAC roof planks were identified to the Games Hall and found to be in an overall good condition initially when inspected in December 2020, yet with some initial signs of localised cracking. Signs of water ingress were identified at that point and roof repairs were complete. Further inspections undertaken of the area at six monthly intervals by a qualified structural engineer.

Following a recent inspection, instigated as a result of water ingress during May 2022, the structural engineer has found further deterioration of the roof planks compared to their previous inspection in December 2021. Signs of shear failure are present which presents risk of immediate collapse and water ingress continues, even with the remedial works that were complete with an aim to mitigate this.

The Games Hall was immediately closed for use to allow officers to review repairs and identify options for remediation works. Three possible options are set out below:

Option 1 – Timber Grillage and Chicken Wire to a localised area, cost of £131,000; expected life span of one to two years;

Option 2 – Timber Grillage and Chicken Wire to the complete Games Hall area, cost of £310,000; expected life span of three to four years; and

Option 3 – Full replacement of the roof to the Games Hall area, cost of £720,000; expected life span of twenty to twenty-five years.

Taking account of the hub and the tenants, it is recommended that Option 3 is taken forward as it delivers a longer-term solution and provides the best outcome, both in terms of health and safety and gives the least disruption to the Partnership Centre. Options 1 and 2 would only provide short term measures and it is more economic for the council to proceed with Option 3, rather than have the risk of spending more by infrequent and irregular remedial works which will ultimately result in having to undertake the scope as per Option 3.

The Swimming Pool Hall which was constructed at the same time as the Games Hall was previously identified as having RAAC planks. Access to inspect the roof area is not possible due to the presence of a fixed ceiling above the ceiling. However, following samples being taken of the roof surface and a review of record photographs and drawings, there is a metal deck constructed immediately above the ceiling which would provide structural support if RAAC planks were to be present, meaning that there is no immediate risk in this area.

The Cabinet Secretary for Finance and the Economy, Kate Forbes, announced the results of the Scottish spending review on 31 May 2022. The Cabinet Secretary confirmed in this announcement that she was willing to accede to a request from COSLA to provide accountability regarding the accounting treatment of service concessions. This involves recognising principal debt repayments over the asset life and for this approach to be applied retrospectively. In West Lothian, this will involve school PPP projects. Whilst further detailed work is required to quantify any benefit it is proposed that the cost of the remedial work at Fauldhouse is funded from this source.

Information of the location of the RAAC roof at Fauldhouse Partnership Centre can be found in Appendix 1.

#### **D.4. Other RAAC Projects**

Other properties where RAAC roofs were identified have been subject to remediation works, stabilisation works or are not identified as a short-term risk with ongoing monitoring. These are as follows:

| <b>Property</b>                         | <b>Remediation / Stabilisation Works</b>  |
|---|---|
| Whitburn Community Centre, Whitburn     | Replacement roof works being progressed due for completion late Summer 2022.  |
| Lanthorn Community Centre, Livingston   | Replacement roof works being progressed due for completion in 2023.   |
| Balbardie Primary School, Bathgate      | Stabilisation works undertaken in Summer 2021 with the replacement of the roof due to commence in Summer 2023.  |
| Riverside Primary School, Livingston    | Stabilisation works undertaken, ongoing monitoring continuing. Scope for a bid to the Scottish Government's Learning Estate Investment Programme is being considered. |
| Knightsridge Primary School, Livingston | Over roof installed, RAAC not structural, ongoing monitoring continuing.  |
| Windyknowe Primary School, Bathgate     | Over roof installed, RAAC not structural, ongoing monitoring continuing.  |

## **D.5. Ongoing RAAC Management and Monitoring Requirements**

For all the properties identified as having RAAC planks, inspections will be undertaken at varying frequency depending upon risk and extent of presence and any evidence of movement or changes will be reviewed. This will involve six monthly structural inspections by engineers. This will be supplemented by weekly inspections by Maintenance Inspectors to monitor potential water ingress or other deterioration of the planks, with particular emphasis on those buildings which have yet to have actions undertaken to address the planks.

Properties where ongoing management and monitoring will be undertaken are as follows:

| <b>Property</b>                         | <b>Proposed Management Arrangements</b>  |
|---|--|
| St Kentigerns Academy, Blackburn        | Six monthly engineers' inspections with additional inspections from Maintenance Inspectors. Further work ongoing on development of an options appraisal. |
| Stoneyburn Community Centre, Stoneyburn | Six monthly engineers' inspections with additional inspections from Maintenance Inspectors. Further work ongoing on development of an options appraisal. |

In circumstances where issues may arise, the Head of Finance and Property Services has delegated authority to undertake immediate, urgent or emergency works to stabilise the RAAC roofs.

## **E. CONCLUSION**

The council continues to implement a comprehensive approach in relation to RAAC within their properties. This report identifies how quickly the condition of these roofs can change in terms of the Fauldhouse Partnership Centre and further reinforces the need for close monitoring to be undertaken.

This report provides investment at Fauldhouse Partnership Centre, funded from one-off resources anticipated from a review of accounting for service concessions.

Stabilisation, remedial or replacement roof works are being progressed where applicable and further work be carried out on potential options at St Kentigerns Academy and Stoneyburn Community Centre.

## **F. BACKGROUND REFERENCES**

Reinforced Autoclaved Aerated Concrete Roofs - Report to Council Executive 22 June 2021

Appendices/Attachments:

Appendix 1 – Location Plan of RAAC Roof at Fauldhouse Partnership Centre

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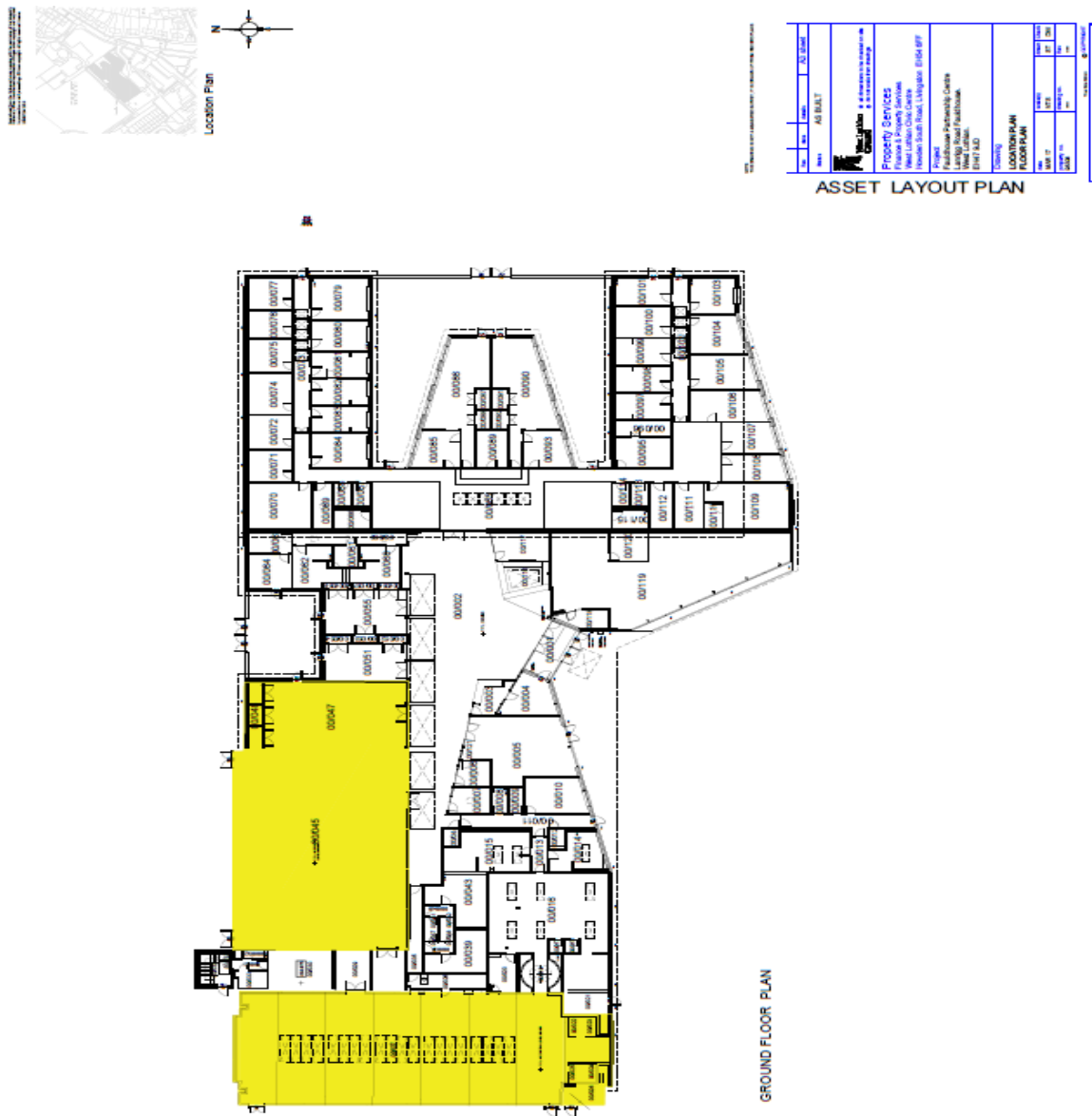
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**Donald Forrest, Head of Finance and Property Services**

Date of meeting: 21 June 2022

**APPENDIX 1 – LOCATION PLAN OF RAAC ROOF AT FAULDHOUSE PARTNERSHIP CENTRE**



Not to Scale