

<b>Committees:</b>	<b>Dates:</b>	<b>Item no.</b>
Community and Children's Services Committee Projects Sub Committee	08/07/2016 20/07/2016	
<b>Subject:</b> Concrete repairs to Cullum Welch House	<b>Issue Report</b>	<b>Public</b>
<b>Report of:</b> Director of Community & Children's Services		<b>For Decision</b>

### Summary

Project status	Green
Project risk	Green – low
Programme status	Post Gateway 3, Pending project restructure
Timeline	Project restructure – July 2016 Complete investigative work – September 2016 Gateway 4 / detailed options appraisal – November 2016 Complete design work/specification – December 2016 Procurement – to spring 2017 Gateway 5 – spring 2017 Works start – summer 2017
Expenditure to date	Concrete testing and make safe – £9,980 Concrete corrosion consultancy fees – £7,800 Architectural fees – £36,150 Structural engineer fees – £18,125 Budget cost plan – £1,950  Total – £74,005
Current works estimate	£900,000-£1,800,000
Project budget total	£1,050,000-£2,050,000

#### **Last gateway approved**

Gateway 3 – Outline Options Appraisal: Concrete testing and repairs at Golden Lane and Middlesex Street Estates was approved by the DCCS Grand Committee on 11 July 2014 and the Projects Sub Committee on 22 July 2014.

#### **Progress to date including resources expended**

Concrete testing to the Golden Lane and Middlesex Street Estates is ongoing. Testing to the Grade II-listed Cullum Welch House (at a cost of £9,980) was carried out in advance of the main programme due to safety concerns about the condition of its externally exposed concrete. Testing results have been analysed by an independent concrete corrosion specialist (at a cost of £7,800) and remedial works have been specified detailing recommendations for a replacement or repair of the affected elements. An architect (at a cost of £10,750) was appointed to obtain the Listed Building Consent

required to commence these works; this was attained on 8 January 2015. This architect was subsequently re-appointed to finalise the design work as per the conditions specified within this consent (at a cost of £25,400). A waiver was granted for this appointment on 1 December 2015. In addition, a structural engineer has been appointed, via a compliant tender process, to ensure that the structural elements specified within the planning consent are met (at a cost of £18,125). A cost plan has also been produced to facilitate a realistic working estimate of possible project budgets depending on the potential scope of repairs (at a cost of £1,950). Total expenditure to date directly relating to concrete repair at Cullum Welch House is therefore £74,005, which is currently charged to the Housing Revenue Account (HRA).

**Summary of issue**

Due to the complexity of the remedial works required to repair the externally exposed concrete elements of Cullum Welch House and the ongoing significant design element involved, it is proposed to split these works off from the main Golden Lane and Middlesex Street concrete testing and repair project and run it as a stand-alone project. Specialist design works for Cullum Welch House would therefore be able to progress with expediency; these would be unhindered by the more prosaic concrete repairs anticipated for the other blocks which are covered by the wider project, and where testing remains ongoing ahead of a potentially lengthy specification and tender process.

**Proposed way forward**

Remedial works required for the north elevation and staircases of Cullum Welch House are known. Further investigative work is, however, recommended to determine if the concrete elements incorporating planters on the south elevations can be externally repaired or if they need to be replaced *in totalis*. Wholesale replacement of these elements would necessarily entail the temporary removal of windows and partition of residences while the works are carried out. Should window removal be required, it may be necessary – due to the age and condition of these units, particularly if they cannot be removed intact so as to make best use of scaffolding – to consider renewing them. The estimated total budget for these works therefore covers a broad range, pending the outcome of this investigative work. It is intended to return to Committee with a Gateway 4 paper once a realistic range of options for this work is known and appropriately costed. At this time, a repair of these elements is the preferred option.

**Financial implications**

**1. Previous estimates**

Description	Previous estimates for concrete repair only at Cullum Welch House as per Gateway 3 report – Concrete testing and repairs at Golden Lane and Middlesex Street Estates (July 2014)
Concrete repair	£600,000
Fees and staff costs	£90,000
<b>Total</b>	£690,000
Funding strategy	Housing Revenue Account (HRA) with 47% recoverable from leaseholders via service charges

<b>Description</b>	<b>Previous estimates for window renewal at Cullum Welch House as per Gateway 2 report – Housing Asset Management Plan (February 2015)</b>
Window renewal	£408,525
Funding strategy	Housing Revenue Account (HRA) with 47% recoverable from leaseholders via service charges

## 2. Current estimates

<b>Description</b>	<b>Current estimates – concrete repair only</b>
Concrete repair	£900,000
Fees and staff costs	£150,000
<b>Total</b>	<b>£1,050,000</b>
Funding strategy	Housing Revenue Account (HRA) with 47% recoverable from leaseholders via service charges

<b>Description</b>	<b>Current estimates – concrete repair with window renewal</b>
Concrete repair	£900,000
Window renewal	£900,000
Fees and staff costs	£250,000
<b>Total</b>	<b>£2,050,000</b>
Funding strategy	Housing Revenue Account (HRA) with 47% recoverable from leaseholders via service charges

Estimated costs have increased significantly from those notified at the previous Gateway for both the concrete repair element (by £300,000) and window renewal element (by £491,475). It should be noted that the original estimates were officers' estimates based on forecasts derived from historical spend on similar projects. The current estimates, of which we have far greater confidence, have been produced by an external quantity surveyor. Furthermore, the increased costs can be attributed to (a) significant inflation in the construction and maintenance industry since the time of writing of prior reports; (b) significant cost inflation in the supply of scaffolding and access equipment. The increase in staff costs and fees (by £60,000 for concrete repair only) are due to the significant design hurdles to be overcome to comply with Listed Buildings constraints (the extent of these requirements was initially under-estimated). In addition, the Gateway 2 report, Housing Asset Management Plan (February 2015), covering window renewal at the Golden Lane Estate presented works costs only; fees and staff costs were not incorporated in the Housing Asset Management Plan.

## Recommendations

- 1) Approve the change in project approach to separate out the works to Cullum Welch House from the wider Golden Lane and Middlesex Street Estates concrete repair project.
- 2) Note the estimate project budget range of £1,050,000-£2,050,000 for the replacement and repair of concrete elements at Cullum Welch House and the potential inclusion of window renewal. A full options appraisal is to be brought to Committee at Gateway 4.

3) Authorise the transfer of the existing estimated £600,000 works budget and £90,000 fees earmarked for Cullum Welch House from the estimated budget of the wider Golden Lane and Middlesex Street Estates concrete repair project.

4) Retrospectively approve the consultancy fees (design, structural and testing expenditure), totalling £74,005, already spent to reach the current position and allocate them to this project. These fees are currently charged to HRA local revenue.

5) Approve a sum of £28,000, comprised of £26,000 to complete the investigative work to the south elevation and £2,000 staff costs, to reach the next Gateway.

## Main Report

<b>1. Issue description</b>	<p><b>1. Background</b></p> <p>Certain externally exposed reinforced concrete elements of the Grade II-listed Cullum Welch House at the Golden Lane Estate are showing significant damage caused by reinforcement corrosion. Concrete testing has revealed that the main elements of the building suffering from damage are the precast concrete balustrades and stairways on the north elevation and the planter units, exposed beams and slab ends on the south elevation.</p> <p>The balustrades and planters are safety-critical items, the primary danger being falling concrete. Secondary dangers include an increased risk of failure to prevent objects penetrating the barriers formed by the balustrade and an increased risk of injury due to the degraded rough edges of the balustrade.</p> <p>Temporary safety netting is in place to mitigate these risks in the short term.</p> <p><b>2. Concrete repairs to Cullum Welch House</b></p> <p>An external concrete corrosion specialist has recommended the following course of action:</p> <ol style="list-style-type: none"> <li>1) The concrete balustrades on the north elevation have reached the end of their safe, useful life and require replacement in full.</li> <li>2) The concrete elements incorporating planters and pot holders on the south elevation require significant remedial works. The potential to make a long-lasting repair (with a 50-100 year life span) should be investigated as this would prove significantly more economically advantageous than replacement. Replacement of these items would entail the temporary removal of windows and partition of residences while the works are carried out.</li> <li>3) Stairwells, exposed beams and slab ends suffering from a few localised areas of cracking and spalling should be repaired.</li> </ol> <p>A design team has been appointed. Listed Building Consent for the concrete repairs was obtained on 8 January 2015. Approval to re-appoint the architect to complete the design work as specified</p>
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within the Listed Building Consent was granted by the Finance Committee on 17 November 2015 and the Projects Sub Committee on 1 December 2015. Subsequently, a structural engineer has also been procured to facilitate the production of detailed structural designs to meet further conditions of the Listed Buildings Consent. A cost planning exercise has also been completed.

### **3. Further investigative work required**

As stated, further investigation is required to determine whether the concrete elements incorporating planters and pot holders on the south elevation can be effectively repaired or whether replacement is required. A cost planning exercise has identified that a fee of £26,000 should be sufficient to cover intrusive testing and laboratory analysis.

### **4. Window removal**

Should the investigation reveal that the replacement of the precast concrete units on the south elevation be required, the adjacent window units will need to be temporarily removed as structural drawings indicate the precast concrete units extend beneath. These windows, and those on the north elevation, are due for replacement or substantial refurbishment in the near future as they approach the end of their useful life. The renewal or refurbishment of windows at Golden Lane Estate are within the Housing Asset Management Plan – 5 Year Programme, as approved by the Projects Sub Committee on 23 February 2015 at Gateway 2.

If the removal of the window units on the south elevation is required, it may well be economically advantageous to combine this with the concrete repair and window renewal or refurbishment at Cullum Welch House. A combined approach will also minimise disruption for residents. Any requirement to include the renewal or temporary removal and return of existing windows will be brought to Committee for approval at Gateway 4.

### **5. Financial implications**

A cost planning exercise has indicated that an estimated works budget (excluding fees and staff costs) of £900,000 should be sufficient to cover the replacement of the concrete balustrades to the north elevation, repair of the staircases and repairs to the concrete elements incorporating planters on the south elevation. If window removal and subsequent replacement is required the estimated works budget will increase to an upper limit of £1,800,000. Incorporating an allowance for staff costs and professional fees, the total estimated project budget for Cullum Welch House is in the range of £1,050,000-£2,050,000 (47% of which would be recoverable from long leaseholders).

### **6. Proposed way forward**

Due to the scale, complexity and design requirements of the concrete repairs required at Cullum Welch House, it is proposed to

	<p>remove these works from the broader Golden Lane and Middlesex Street Estates concrete repair project, and procure and deliver them as a stand-alone project. Once the aforementioned investigative works are complete, a full options appraisal will be brought to Committee for assessment at Gateway 4.</p> <p>Running parallel to this, estate-wide concrete testing, as approved at Gateway 3 by the DCCS Grand Committee on 11 July 2014 and the Projects Sub Committee on 22 July 2014, will continue at Golden Lane and Middlesex Street Estates. The outcome of this testing programme will be brought to Committee via a separate Gateway 4 report where options for a planned programmed of more prosaic repairs will be presented for approval.</p>
<p><b>2. Last approved limit</b></p>	<p>The total estimate of costs for concrete testing and repair at Golden Lane and Middlesex Street Estates at Gateway 3 was £2,587,000, subject to a potential range of £2.5-3 million; the total works budget for Golden Lane was estimated at £1,800,000 of which £600,000 was earmarked for Cullum Welch House. Further to this, a sum of £1 million was approved at Gateway 3 for concrete testing and any immediately required repairs at the two estates (£750,000 for Golden Lane Estate and £250,000 for Middlesex Street Estate); none of this sum has been spent at Cullum Welch House. All expenditure to date (totalling £74,005) directly relating to the required concrete repairs at Cullum Welch House has been charged to HRA local revenue.</p>
<p><b>3. Options</b></p>	<p>1) No change to the existing project approach. Concrete repairs to Cullum Welch House will remain within the wider Golden Lane and Middlesex Street Estates concrete repair project. Retrospective approval of the consultancy fees (design, structural and testing expenditure), totalling £74,005, already spent to reach the current position; and approval of a further £28,000 to facilitate the investigative work detailed to reach the next Gateway.</p> <p>2) Establish a stand-alone project for the concrete repairs at Cullum Welch House, granting retrospective approval of the consultancy fees (design, structural and testing expenditure), totalling £74,005, already spent to reach the current position; and approval of a further £28,000 to facilitate the investigative work detailed to reach the next Gateway. A full options appraisal, including the potential for window renewal if temporary removal of units is likely to be required, will be brought to Committee at Gateway 4.</p> <p>Option 2 is recommended.</p> <p>There is no practicable 'do nothing' option – the condition of the externally exposed concrete precludes this. In addition, the Grade II- listed status of Cullum Welch House presents significant design hurdles which must be addressed.</p>

## Appendices

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