FINANCE AND RESOURCES COMMITTEE

DATE:	November 2021
TITLE OF REPORT:	Facilities and Estates Update
AUTHOR AND CONTACT DETAILS	Stella McManus, Depute Principal Stella.mcmanus@slc.ac.uk
PURPOSE:	To provide the Finance and Resources Committee with a summary of in-year performance to date.
KEY RECOMMENDATIONS/ DECISIONS:	The Board is asked to note the following updates: • progress of the backlog maintenance works. • the plant room findings and recommendations • issues with the lift shaft. • contract performance review • sustainability measures The Board is asked to approve the final additional spend on the roof.
RISK	• Negative impact on the learner and staff experience should Covid works not be completed on time.
RELEVANT STRATEGIC AIMS:	• Highest quality education and support - providing a high-quality environment for staff and students • Sustainable behaviours – environmentally sustainable behaviours.
SUMMARY OF REPORT:	• To note the progress of the Backlog Maintenance Improvement works, and to approve the additional spend required to finish the project, given additional works required and which occasioned time delays. • The plant room findings, which include failure of the sump pump and shut off valve to operate, and subsequent recommendations and costs, which include undertaking urgent work to replace the tank and the overflow system. • The lift shaft movement, which will result in strengthening work being required. • An update on our service providers and their RAG status and noting that some providers are part of the procurement processes in train.

1. INTRODUCTION

1.1 The focus of the Facilities Department has been on the emerging roofing defects which have been highlighted during the programme of works which was started in April 2021. The contractors found several serious defects which may have been caused through previous repairs. This has had to be managed throughout the autumn term and we are grateful to students and staff for their ongoing patience with this work.

1.2 Since the last Committee, other key estates challenges have included the plant room failure which resulted in flooding; and, more recently, the lift shaft integrity issues, further detail of these is included in the paper.

1.3 In addition, the Facilities Department continues to ensure a COVID-secure environment through maintaining existing arrangements while preparing for the return to campus, as well as continuing its work on contract monitoring to ensure that all facilities contracts are up to date, compliant and provide value for money.

2. BACKLOG MAINTENANCE WORKS

2.1 Progress Update

2.2 For the benefit of our new Committee members, the initial work that had been planned was part of our identified Backlog Maintenance Work, which was funding that we had received from the Scottish Funding Council based on a SFC estates survey, which had been conducted five years ago. Each year the college was able to use this allocated funding to undertake identified capital work.

2.3 The initial work included the replacement of our air conditioning units and CCTV, which had reached the end of their lifespan. It was during this work that it was discovered that the roof had significant issues which were the cause of the leaks that had been occurring on the third floor over the past couple of years. As a result, it was recommended that our roof should be redone with new insulation and resealed

2.4 The roof work is due to finish by the end of the month, which moved from the original completion date of 25 October 2021. The last of the roof equipment was being reinstated back onto the roof on 10 November 2021. To date all ground floor and 1st floor units are now live and fully functioning with air conditioning and ventilation. The rear section of the 3rd floor, including the learning resource centre are also live. The canteen and training kitchens are waiting for the final health and safety gas sign off before full use of these areas commences but is anticipated that this will happen shortly.

2.5 The recent water ingress from the third-floor parapet (27 October 2021) is currently being investigated. At this stage findings are that it is due to the roof works being incomplete and PMC (our contractors) have committed to do a water test at conclusion of the roof works (which will be witnessed by all parties, including our project manager, mechanical and electrical and surveyor experts) to verify that there is no ingress from the roof or the parapet. PMC are looking at potential further investigations to other elements (including the fins and the façade) just to ensure that there are no further issues related to walls.

2.6 The college has been following professional advice from its project management team, mechanical engineers and quantity surveyors, Gardiner and Theobold,

Hawthorne and Boyle and Doig and Smith, all of which have a long history of working with the college and were involved in its original build.

2.7 In addition, to ensure appropriate contract oversight, the Depute Principal and Head of Facilities are meeting the contractors weekly, and there are formal progress meetings with all contractors, Project Managers, the Heads of Finance and Estates and the Depute Principal monthly. This allows for early alert to issues, and effective communications with the College Leadership Team and college staff on progress and any possible disruption.

2.8 ***Cost Update***

2.9 Table 1 shows the approved spend from the Finance and Resource Committee members in July 2021 for the additional roof work, which equated to £939,589.46. The full paper from the July approval can be found in Annex A.

2.10 *Table 1: Executive Financial Summary July 2021*

Financial Summary	Amount £
The authorised final spend for the works is	**939,589.46**
This compares to the Initial Authorised Budget of	657,015.82
Roof costs of	241,850.72
Additional Construction Costs of	20,882.92
Additional Fees due to extension of project (inc roof) to 29th October 2021	19,840

Note the above costs exclude VAT

2.11 There has been subsequent movement in the projected overall final costs which are detailed in Table 2 below. There has been incremental movement in spend which has included the extension of the rental of air conditioning units to keep our server rooms cool, approximately £10k, replacement cables £7k as well as the extension costs of the project approximately £20k and the estimated final additional professional fees of £40k. There are also additional costs related to the final testing and commissioning work of the air conditioning units which need to be completed over the next few weekends.

2.12 The estimated final costs were provided to the College on 27 October 2021 by the project management team, therefore it was considered appropriate to bring the request for approval to this FRC meeting.

2.13 At the time of writing the final costs are projected to be £1,090,259.22, the Committee is asked to approve the additional spend noted in the table, of £89,079.76 and £61,590 respectively and to note that this is affordable for the College.

2.14 Table 2: Executive Financial Summary November 2021

Financial Summary	Amount £
The estimated Final Account for the works is	**1,090,259.22**
This compares to the Authorised Budget of	939,589.46
Additional Construction Costs of	89,079.76
Additional Fees due to extension of project and professional fees	61,590

Note the above costs exclude VAT

3 THE PLANT ROOM

3.1 The plant room investigation report has just been concluded by Hawthorne and Boyle (mechanical engineers) and the key findings include:

3.1.1 The boiler room had flooded through a failure to one of the tank incoming valve arrangements, resulting in the tanks overflowing onto the boiler room floor.

3.1.2 The sump pump failed to operate.

3.1.3 The second level of protection, which is the low-level level leak detection system that should close off the incoming mains water supply, did not operate.

3.1.4 It was also noted that the tank panels have small holes drilled into the insulation panels, the engineers have never experienced these types of holes in other water tanks. The assumptions made are that it was part of the manufacturing process (although they are in a different position around the tank) or have been drilled post installation. They do not, however, affect the integrity of the tanks.

3.2 The recommendations from the report are as follows:

3.2.1 The existing trend automatic controls systems has been modified on numerous occasions and the existing component parts are now obsolete, and with the bms/automatic controls being an integral part of system operations and safety monitoring, then it is recommended that consideration should be given to upgrading the controls system component parts and software within the next 2 years.

3.2.2 Boiler room supply and extract fans should have their air volumes rechecked to confirm that the statutory combustion air requirements are being maintained and the fans are fully inspected to determine their current condition and upgraded as these fans are a high-risk item as air flow interlocks are required to maintain boiler operations.

3.2.3 The existing boiler room sump pump is now at its end of life and considering the recent pump failure, it is recommended that planned replacement be considered within the next 2 years

3.2.4 The existing cold water booster set is nearing its end of life and we would recommend that planned replacement be considered within the next 5 years.

3.2.5 The existing LTHW pressurisation unit and expansion vessels are nearing the end of their life expectancy and we would recommend that planned replacement be considered within the next 5 years.

3.3 The recommendations also include replacing the tank and associated supports as a matter of urgency to ensure that they are compliant with sector regulations. In addition, a new tank overflow and warning pipes should be extended to a new floor mounted sump tank, with a new submersible sump pump and tank level sensors, all of which are interconnected to a building management system. The incoming main water solenoid valve would activate upon an alarm that the water tanks are in an overflow condition and close off the main incoming water supply.

3.4 This work will be undertaken as soon as possible to minimise any future risk of flooding, with a longer-term plan for the additional non urgent works established. A similar issue occurred over the Christmas break in 2014-15, where the valve did not activate therefore not shutting off the main water supply. The recommendations from this report would ensure that the college had improved levels of protection for the future.

3.5 Cost Implications

3.6 Urgent

3.6.1 Installation of new Water tank and associated supports £10,000

3.6.2 Installation of new Water tank overflow system £6,000

3.7 Year 1

3.7.1 Take boiler room ventilation air flow rates to confirm ventilation complies with BS 6644 2005 Gas fired appliances £1,500

3.7.2 The checking of all bms safety devices to ensure they close down valves and system. £2,500

3.8 Year 2

3.8.1 Upgrade of existing bms/automatic controls software and controllers/sensors £35,000

3.8.2 Replacement boiler room sump pump £1,500

3.9 Year 5

3.9.1 Cold water booster pump set £ 5,000

3.9.2 Pressurisation unit and expansion vessels £5,000

3.9.3 Domestic hot water expansion vessels £3,000

3.10 If all the recommendations are agreed the total cost for this work would be approximately £69,500, over a 5-year period not including VAT. It is recommended that the college proceeds with undertaking the urgent works. Further advice will be sought on the appropriate timings of the works to ensure cost efficiency and contract effectiveness.

4 LIFT SHAFTS

4.1 Recent maintenance work undertaken on the lift showed that there had been movement in the middle and right walls of the lift shaft, which means that one of the lifts is not currently in use. We have been advised that the “left” lift should only be used for essential need in order to minimise its use.

4.2 We are awaiting the outcome of the structural report but anticipate steel reinforcement will be required in both lift shafts. A similar issue occurred a few years ago with the service lifts, and we have been in touch with those engineers for more information. The Committee will be advised of next steps once there is further information available.

5 CONTRACT MONITORING

5.1 As reported in May 2021, the College Leadership Team have been working with the college’s Procurement function to progress the updating of contracts, the introduction of contracts where required and moving contracts to collaborative frameworks where appropriate. This helps to ensure that the college is compliant with relevant legislation.

5.2 Each contract review starts with a list of key objectives and identifies opportunities to improve, both in terms of the current contract itself, and in feeding into future contract negotiations, and key achievements. The review uses a scorecard format and will identify key improvement actions, with timescales and responsibilities stated. Any issues and risks identified will be raised with the supplier and a system of measuring and monitoring KPIs will be introduced. Examples of this would be:

- Shortages reported;
- Deliveries missed or late;
- Quality of service or goods;
- Invoice accuracy;
- General customer satisfaction as reported by the end user.

5.3 To support with the large number of contract reviews in train, our APUC Procurement specialist increased their hours to ensure appropriate progress continues to be made. For example, the waste management tender, which is being done in conjunction with New College Lanarkshire to ensure value for money is in progress, was concluded on 4 October. A full breakdown of progress can be seen in the Procurement Report, which is updated on a quarterly basis.

5.4 Our high level / large volume maintenance and repairs are contracted out to specialist businesses and are obtained via tendering process in collaboration with the College's procurement professional. These items and contractors are shown in the table below alongside their RAG ratings.

5.5 *Table 2: Service Providers*

RAG Rating		Expense - Supplier	Progress to Green: Key Actions
Last Quarter	This Quarter		
		Gas - Supply – Total Gas	
		Gas - College Infrastructure – ECG	Currently amber due to Plant Room issue, review of all maintenance and service in train.
		Electricity – Supply – EDF	
		Electricity – Feed in Tariff – Scottish Power	
		Electricity – College Infrastructure – Docherty Electrical	Tender process in train. Moved to green after Facilities put in place a
		Elevators - Kone, maintaining all 5 elevators	
		Mechanical & Ventilation – ECG	Currently amber due to Plant Room issue, review of all maintenance and service in train.
		Kitchen equipment, including refrigeration units – React Catering Services Ltd	
		Water – Supply – Business Stream	
		Water – College Infrastructure - ECG	Currently amber due to Plant Room issue, review of all maintenance and service in train.
		Roofs - Roof Management Ltd	
		Laundry Equipment PPM & Reactive – JLA	
		CCTV – SSCL	
		Security Systems (Alarms & Access control) – Connolly Security Services	Good progress made, reactive and responsive, faults fixed in a timely manner.
		Fire Systems – Connolly Security Services (Fire Division)	
		Pest Control – Environmental Services Pest Control Ltd	
		Machine Maintenance – Inhouse	Currently being reviewed, key actions include growing the in-house skill set and planned preventative maintenance.
		Mobile phones – EE	
		Telephones – Quantum Telecom and Inhouse	

		Waste & Recycling – Enva	This quarter has seen a decline in service due to the lack of drivers because of the impact of COIVID-19.
		Ground's maintenance - Idverde	Slight improvements since last quarter. In addition, the tendering process is at the presentation stage.

5.6 Two suppliers have moved to green, one to amber and the rest are unchanged. Some of the above services are also part of the ongoing procurement processes that are in train.

6 SUSTAINABILITY

6.1 Table 2: Solar Panel Production

Reporting Period	Construction Wing	Annex	Low Carbon House	Total Kwp
Apr–Jun 2020	14,025	4,741	652	19,418
Jul–Sep 2020	13,303	3,450	473	17,226
Oct-Dec 2020	3,567	612	117	4,296
Jan-Mar 2021	172 (FAULT)	1,011	183	1,366
Apr-Jun 2021	171 (FAULT)	4,345	585	5101
Jul - Sept 2021	1,378	3931	555	5,864

NOTE: Quarter year comparison is low due to a fault with one of our arrays. This has been fixed, however the output won't have reached its full potential.

6.2 The Solar PV panel figures are as expected for this time of year (not including the total column due to the fault). This reporting period is usually one of our highest energy production period, although is slightly lower than at this point last year due to more overcast days.

6.3 The table below shows the waste collected in the last three months, split by category. Recycling categories are every row except for "General Industrial Waste". There is no unusual activity, and the college is keen to continue to maintain its low levels of "General Industrial Waste."

6.4 Table 3: Waste Categories

Category of Waste	Jul-21	Aug-21	Sept-21
Cardboard	0.06	0.00	0.08
General Industrial Waste	0.65	0.77	0.64
Glass Packaging	0.00	0.00	0.00
Mixed Construction and Demolition Waste	0.00	0.00	0.00
Mixed Recycling	0.04	0.15	0.14
Recovered from General Waste / RDF	10.36	14.09	10.71
Wood	3.24	1.82	2.14
Wood Fines	0.00	0.00	1.20
Biodegradable Kitchen / Canteen Waste	0.00	0.00	0.18
Mixed WEEE	0.00	0.00	0.00
Other Batteries and Accumulators	0.00	0.00	0.00
Total	14.35	16.83	15.09

6.5 Work is currently being done to “bring this data” to life, especially in relation to what the outputs from our solar panels mean, for example quantifying it in terms of the number of baths that could be produced from the hot water generated. Our Facilities and Construction teams, in particular our Curriculum Manager for Plumbing and Renewables, are working together on this, and they will also be involved in the implementation of a new building information management system should this be approved.

7 ENERGY CONSUMPTION: ALL BUILDINGS

7.1 Table 4 below provides an overview of energy consumption across the estate over the last 3-year period, across all the utilities: gas, electricity and water. The change in the utilisation of the building will obviously affect the comparisons, but the table is designed to compare the movement in the quarter over the prior year equivalent, and the current rolling year over the prior year equivalent.

7.2 Not surprisingly, usage of all three utilities continues to be down markedly over the last year, although an increase can be seen in the last quarter due to the fact that the building is being used more. Further investigation would appear that the water figures for the previous three quarters may have been lower than expected, and the team are currently just checking to ensure of accuracy.

7.3 Table 4 Energy Consumption

		Finance and Resources Committee		
		Estates Report - November 2021		
		Energy Consumption - all buildings		
	Usage in kWh	Movement over prior year quarter	Rolling Year	Movement over prior rolling year
	Gas - kWh			
Jan - Mar 2019	522,541	-23%	1,523,877	-14%
Apr - Jun 2019	339,949	4%	1,535,774	-14%
Jul - Sep 2019	250,064	13%	1,564,445	-9%
Oct - Dec 2019	500,643	11%	1,613,197	-4%
Jan - Mar 2020	636,674	22%	1,727,330	13%
Apr - Jun 2020	145,432	-57%	1,532,813	0%
Jul - Sep 2020	220,102	-12%	1,502,851	-4%
Oct - Dec 2020	408,878	-18%	1,411,086	-13%
Jan - Mar 2021	555,678	-13%	1,330,090	-23%
Apr - Jun 2021	330,348	127%	1,515,006	-1%
Jul - Sep 2021	**205,185**	**-7%**	**1,500,089**	**0%**
	Electricity - kWh			
Jan - Mar 2019	635,936	-3%	2,221,890	-1%
Apr - Jun 2019	474,459	-8%	2,177,952	-5%
Jul - Sep 2019	431,202	-5%	2,156,326	-4%
Oct - Dec 2019	562,561	-8%	2,104,158	-6%
Jan - Mar 2020	574,224	-10%	2,042,446	-8%
Apr - Jun 2020	225,865	-52%	1,793,852	-18%
Jul - Sep 2020	299,521	-31%	1,662,171	-23%
Oct - Dec 2020	472,746	-16%	1,572,356	-25%
Jan - Mar 2021	775,982	35%	1,774,114	-13%
Apr - Jun 2021	368,153	63%	1,916,402	7%
Jul - Sep 2021	**283,081**	- 0.05	1,899,962	14%
	Water Consumption - cubic metres			
	Usage in m3	Movement over prior year quarter	Rolling Year	Movement over prior rolling year
Jan - Mar 2019	2,872	-6.2%	10,751	0%
Apr - Jun 2019	2,230	-26.1%	9,962	-9%
Jul - Sep 2019	2,185	13.9%	10,229	-7%
Oct - Dec 2019	2,628	-10.7%	9,915	-9%
Jan - Mar 2020	2,225	-22.5%	9,268	-14%
Apr - Jun 2020	628	-71.8%	7,666	-23%
Jul - Sep 2020	1,109	-49.2%	6,590	-36%
Oct - Dec 2020	203	-92.3%	4,165	-58%
Jan - Mar 2021	74	-96.7%	2,014	-78%
Apr - Jun 2021	201	-68.0%	1,587	-79%
Jul - Oct	**1,886**	**70.1%**	2,364	**-64%**

ANNEX A

DATE:	28 July 2021
TITLE OF REPORT:	Backlog Maintenance Works: Roof Issue
AUTHOR AND CONTACT DETAILS	Stella McManus Stella.mcmanus@slc.ac.uk
PURPOSE:	To provide a further update to Finance Committee of the roof repair works; to inform it of the quotes and costs required to undertake the roof repairs; and to provide an update on additional costs now required for to the initial air conditioning work.
KEY RECOMMENDATIONS/ DECISIONS:	The Board is asked to: • Note the quotes received, and approve the investment required in the roof works. • Note the additional spend now required to conclude the works to the upgrade the air conditioning.
RISK	• That the roof and air conditioning works impact on the quality of learning and teaching, and the learner experience. • That the projects are delayed causing yet further cost increases, which the college cannot afford; and negative impact on the staff/student experience if the air conditioning works are not concluded effectively, or there continues to be water ingress into the building.
RELEVANT STRATEGIC AIM:	• Successful Students • The Highest Quality Education and Support • Sustainable Behaviours
SUMMARY OF REPORT:	• Two quotes received from six enquiries, PMC: **£241,850.72** and RIG Construction £358,028.11, not including VAT. • Recommended that the college approves the PMC quote. • Additional costs to air conditioning work due to project delays as well as additional fees are **£20,882.92** and **£19,840** respectively. • The overall estimated final account for the works is **£939,589.46** • Dilapidation funding for 2021-22 will be used to pay for the additional work and the college will use £120,000 of its own funds, which is available. • AC project is now on track to complete on 23rd August 2021.

1. INTRODUCTION

1.1 This paper informs and updates the Finance Committee of quotes and total costs received for the roof work, the detail of which was outlined in my report of 9 July 2021, as well as the additional costs incurred to the air conditioning work due to delays.

2 ROOF QUOTES AND RECOMMENDATION

2.1 The College can confirm that six enquiries were sent out, and two quotes were received.

2.1.1 PMC: Initial quote £294k, revised quote £241,850.72 (plus VAT)
2.1.2 RIG Construction: £358,028.11 (plus VAT)

2.2 The project management team at Doig and Smith worked with PMC and were able to decrease their initial quote by approximately £50k as a result of using existing roof materials such as piping, which is in good condition as was replaced recently.

2.3 It is recommended that the PMC bid is approved, in order to progress the work as quickly as possible.

3 COSTS

3.1 The air conditioning work was scheduled to finish on 6 August 2021, and now due to delays it won't be completed until 23 August 2021.

3.2 The table below shows the estimated final account for the project and includes the cost of the delay to the air conditioning project, additional fees and further costs required to complete the roof work.

3.3 Table 1: Executive Financial Summary

Financial Summary	Amount £
The estimated Final Account for the works is	**939,589.46**
This compares to the Authorised Budget of	657,015.82
Roof costs of	241,850.72
Additional Construction Costs of	20,882.92
Additional Fees due to extension of project (inc roof) to 29th October 2021	19,840

Note the above costs exclude VAT

3.4 We have dilapidation funding for 2021-22 which will be used to pay for the additional costs, however we will need to use £120,000 of the college's own funds, which is available.

3.5 The latest progress report received 26th July 2021 demonstrates positive progress and the contractors have stated that they are confident that all units will be completed by the time the vast majority of students return week commencing 30th August 2021.