



**Office of  
Internal Audit**

FLORIDA INTERNATIONAL UNIVERSITY

**Audit of Facilities Assessments  
and Deferred Maintenance**

**Report No. 23/24-01  
August 7, 2023**

# **FIU** | Office of Internal Audit

**Date:** August 7, 2023

**To:** John Cal, Associate VP Administrative Affairs, Facilities Administration

**From:** Trevor L. Williams, Chief Audit Executive



**Subject: Audit of Facilities Assessments and Deferred Maintenance, Report No. 23/24-01**

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We have completed an audit of Facilities Assessments and Deferred Maintenance for the period of July 1, 2021, through June 30, 2022, and have assessed the current practices through May 2023.

The Facilities Management Department (FMD or “Facilities”) provides oversight of all aspects of the physical environment on the University’s campuses. For the period tested, Facilities had 44 deferred maintenance projects with expenditures of \$12,765,334 (13% of all Major and Minor project expenditures during the fiscal year). During the audit, we reviewed Facilities’ processes to ensure that the University has existing controls that are adequate and provide reasonable assurance that Facilities assessments and deferred maintenance are adequately scheduled, performed, monitored, and communicated.

In summary, we concluded that Facilities has established internal controls and processes for the areas in scope and has excelled in their management of some of these areas, including the permitting of deferred maintenance projects, managing services contracts, and approving project expenses. However, we identified areas for process improvement, including processes related to Life Cycle Asset Management, preventive maintenance, and deferred maintenance project monitoring. We offered seven recommendations to address the issues identified in the audit. Management has agreed to implement all recommendations offered.

We want to take this opportunity to express our appreciation to you and your staff for the cooperation and courtesies extended to us during the audit.

Attachment

C: FIU Board of Trustees

Kenneth A. Jessell, University President

Elizabeth M. Béjar, Provost, Executive Vice President, and Chief Operating Officer

Aime Martinez, Chief Financial Officer and Senior Vice President for Finance and Administration

Javier I. Marques, Vice President for Operations & Safety and Chief of Staff, Office of the President

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# EXECUTIVE SUMMARY

## Introduction

Facilities Management's mission is to provide for the physical development and growth of the University community. Facilities is committed to providing quality, sustainable facilities, and diligent oversight of all aspects of the physical environment.

## What We Did

We performed this audit to determine if Facilities has processes in place for managing the assessments of facilities and monitoring deferred maintenance.

## What We Concluded

Facilities has implemented proactive measures to address and manage assessments and deferred maintenance. However, we have identified opportunities to further improve these processes. Specifically, controls could be strengthened by the following actions:

### Life Cycle Asset Management (LCAM) Process

- Comprehensive written departmental procedures of the LCAM process do not exist. Management should develop comprehensive procedures for the existing LCAM process.
- Assessment dates were not updated in a timely manner within VFA for 79% of the systems tested. Management should ensure all building assessments are up to date in VFA.
- We found a total of seven assets across all campuses that were not included in VFA Facility (VFA). Management should add the missing assets to VFA.

## Preventive Maintenance Schedule

- Preventive maintenance was not automatically scheduled for select critical life safety assets or properly documented in Maximo. Management should ensure that preventive maintenance is automatically scheduled for all critical life safety assets and that the completion of preventive maintenance is timely documented within Maximo.

## Monitoring Project Schedules and Financials

- The FMD lacks a system with scheduling capabilities, including the ability to develop schedules tied to key milestones and flagging schedule deviations and potential project delays. Management should consider implementing a robust Construction Project Management System that encompasses all key processes of facilities management and is fully integrated with PantherSoft.

- Reconciliations between Facilities' internal reports and PantherSoft are not consistently conducted, maintained, or reviewed by a second individual. Management should formalize the process for reconciling the internal reports.

The reportable conditions found and the background giving rise to the foregoing recommendations are detailed in the Observations and Recommendations section beginning on page 7 of this report. We have also included the mitigation plans management has proposed in response to our observations and recommendations, along with their implementation dates and complexity ratings.



## **OBJECTIVES, SCOPE, AND METHODOLOGY**

Pursuant to the Office of Internal Audit (OIA) approved annual plan for the 2022-2023 fiscal year, we completed an audit of Facilities Assessments and Deferred Maintenance. The primary objective of our audit was to determine whether existing controls and procedures were adequate and provided reasonable assurance that facilities assessments and deferred maintenance were adequately scheduled, performed, monitored, and communicated.

Our audit period was July 1, 2021, through June 30, 2022. Additionally, we assessed the current practices through May 2023.

We conducted our audit in conformance with the International Standards for the Professional Practice of Internal Auditing and included tests of the accounting records and such other auditing procedures, as we considered necessary under the circumstances. Sample sizes and transactions selected for testing were determined on a judgmental basis applying a nonstatistical sampling methodology. Therefore, our test results are limited to our sample and might not be representative of the population from which the sample was selected. Audit planning and fieldwork were conducted from November 2022 to May 2023.

During the audit, we:

- Interviewed responsible personnel;
- Reviewed University policies and procedures, and applicable laws, rules, and regulations (federal and state, accordingly);
- Obtained an understanding of Management's processes pertaining to facility assessments and deferred maintenance;
- Evaluated documentary evidence, including logs of all projects with deferred maintenance expenditures; and
- Reviewed and evaluated in-scope controls.

We reviewed all internal and external audit reports issued during the last three years and found no reports with any applicable recommendation related to the scope and objectives of this audit, which otherwise would have required follow-up.

## **BACKGROUND**

Florida International University's Facilities Management Department is an organizational unit of the Office of Finance and Administration. The FMD is responsible for the overall development, design, operation, and maintenance of the University's physical facilities.

In order to maintain appropriate safety, health, environmental, building code compliance, and overall standards for all University facilities, central control for the review and approval of all maintenance and operations projects must be approved by the FMD prior to implementation.

### **Facilities Assessments<sup>1</sup>**

As part of the ongoing effort to help the University community stay safe and healthy, the FMD conducts periodic assessments of each University building on a 4-year rolling schedule through the Life Cycle Asset Management program. The assessment program consists of a multi-disciplined team focused on major building systems, including building envelope, electrical, Heating Ventilation and Air Conditioning (HVAC), plumbing, elevators, and mechanical systems. The FMD utilizes VFA Facility, a capital planning software, to facilitate assessments, catalog and prioritize systems based on their estimated remaining life, and develop the critical deferred maintenance list that is used for funding requests.



VFA has reporting capabilities that allow the FMD to identify assets and systems that require maintenance or replacements and can calculate the remaining life of systems. The Facilities Planning Coordinator operates the VFA software. A report from VFA is generated to identify the systems that should be reviewed prior to the assessment. After conducting assessments, the Facilities Planning Coordinator records the assessment results into VFA.

### **Permits**

The University's Building Official administers the Building Code Administration Program of Florida International University (FIU). On behalf of the Building Official, the Building Code Administrator administers and reviews all applicable technical codes and regulations related to the construction program; reviews each project phase; issues permits, coordinates or performs construction inspections and issues Certificates of Occupancy or Completion. Eventually, after completion, the building gets transferred over to Facilities for future maintenance.

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<sup>1</sup> Facilities Management's LCAM team conducts visual assessments of major building systems within the University's facilities which are the subject of this audit. These assessments do not rise to the level of full technical inspections which may be part of a later repair or project.

## Deferred Maintenance

The State University System (SUS) defines deferred maintenance and repairs as,

*“Maintenance and repair activities not performed when they should have been or scheduled to be due to a lack of resources (e.g., funding, labor, time). As such, the needed repairs/maintenance are not performed and deferred to a later date. This includes preventive maintenance and/or repairs needed to preserve or maintain the asset, and failure to perform it leads to asset deterioration and, ultimately, asset impairment.”*

The FMD has been utilizing multiple funding sources, including Educational & General (E&G) funds to cover the cost of deferred maintenance. Additionally, the FMD allocated Plant Operations and Maintenance funds from newer buildings to older buildings to provide funding for deferred maintenance. From July 1, 2021, through June 30, 2022, the FMD provided us with logs for 44 deferred maintenance projects, which had expenditures totaling \$12,765,334.

In 2021, the University submitted a request to the state to fund approximately \$143 million (512 projects) of deferred maintenance. The request prioritized projects by their level of criticality. In response to the *American Rescue Plan Act of 2021*, the Board of Governors (BOG) approved an \$843 million amendment to the SUS 2022-23 Fixed Capital Outlay Legislative Budget Request in which FIU was allocated \$30.7 million to fund deferred maintenance projects. This funding was received in October 2022 and following the release of the deferred maintenance funds, the FMD began issuing design contracts for these projects.

The FMD has developed a database that serves as a repository for project activity and data. However, while this system serves to organize data, it does not have the capability to publish reports on overall spending. Independently, logs (“BR Logs”) of each project’s spending are prepared and manually maintained by the Facilities’ accountants. The BR Logs, which undergo daily updates, encompassing all incoming construction activity, feeds into their “Monthly Summary Report”, which is used to prepare and distribute internal financial reports on all projects’ spending to the Associate VP of Facilities Management.



## OVERALL ASSESSMENT OF INTERNAL CONTROLS

Our overall assessment of internal controls is presented in the table below.

INTERNAL CONTROLS ASSESSMENT			
CRITERIA	SATISFACTORY	OPPORTUNITIES TO IMPROVE	INADEQUATE
Process Controls		X	
Policy & Procedures Compliance	X		
Effect	X		
Information Risk	X		
External Risk	X		
INTERNAL CONTROLS LEGEND			
CRITERIA	SATISFACTORY	OPPORTUNITIES TO IMPROVE	INADEQUATE
<b>Process Controls:</b> Activities established mainly through policies and procedures to ensure that risks are mitigated, and objectives are achieved.	Effective	Opportunities exist to improve effectiveness	Do not exist or are not reliable
<b>Policy &amp; Procedures Compliance:</b> The degree of compliance with process controls – policies and procedures.	Non-compliance issues are minor	Non-compliance issues may be systematic	Non-compliance issues are pervasive, significant, or have severe consequences
<b>Effect:</b> The potential negative impact to the operations- financial, reputational, social, etc.	Not likely to impact operations or program outcomes	Impact on outcomes contained	Negative impact on outcomes
<b>Information Risk:</b> The risk that information upon which a business decision is made is inaccurate.	Information systems are reliable	Data systems are mostly accurate but need to be improved	Systems produce incomplete or inaccurate data which may cause inappropriate financial and operational decisions
<b>External Risk:</b> Risks arising from events outside of the organization’s control; e.g., political, legal, social, cybersecurity, economic, environment, etc.	None or low	Potential for damage	Severe risk of damage

## **OBSERVATIONS AND RECOMMENDATIONS**

### **Areas Within the Scope of the Audit Tested Without Exception:**

#### **Construction Inspections**

The Building Code Administrator (“Administrator”) administers and reviews all applicable technical codes and regulations related to the construction program. The Administrator also issues permits before construction can commence. Per Florida Building Code 105.1 (Permits),

*“Any owner or owner’s authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any impact-resistant coverings, electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the building official and obtain the required permit.”*

We selected a sample of 10 deferred maintenance projects with expenditures during the audit period and validated that permits (when applicable) had been obtained before the contractor started work on the project. We also determined that inspections (if applicable) were completed by the responsible individuals.

#### **Facilities Service Contracts**

Facilities utilizes service contracts to complete both preventive and corrective maintenance on certain assets within the University.<sup>2</sup> We judgmentally selected a sample of three service contracts based on Facilities’ response to our most recent University-wide Risk Assessment. The contracts selected were for services related to the elevators, HVAC, and chemical water treatment. After reviewing the maintenance logs provided by Management, we validated that contracts are being properly fulfilled.

#### **Expense Testing**

Facilities utilizes internal reports (BR Logs) to monitor project expenses and transactions. To ensure that the information on the internal reports is accurate and properly approved, we selected five deferred maintenance projects totaling \$4,483,288 (of 44 projects with expenses totaling \$12,765,334).<sup>3</sup> From these five projects, we sampled 25 transactions

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<sup>2</sup> FIU uses service contracts to cover the maintenance and servicing of equipment over a specific period. The service contracts between the contractor and FIU include preventive maintenance, (and full repair services in the case of the HVAC and elevators), quarterly reviews, and chemical testing for the water treatment program service contract.

<sup>3</sup> These five deferred maintenance projects were also tested in Observation No. 3, within the Financial Monitoring section on page 17.

(of 79) totaling \$3,714,498 and validated without exception that expenses were supported, allowable, and properly approved.

### **Critical Deferred Maintenance Funding**

On an annual basis, the head of each department within Facilities meets to discuss which systems should be included within the master critical deferred maintenance list. To determine the completeness of the list, we selected a sample of three buildings (Primera Casa, Deuxieme Maison, and Viertes Haus) from the Modesto A. Maidique Campus and generated a report from VFA to ensure the systems identified as critical for those buildings were included in the list. For the three buildings, we identified all systems with critical deferred maintenance that were over two years past due and traced them to Facilities' master critical deferred maintenance list without exception.<sup>4</sup>

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<sup>4</sup> Critical deferred maintenance refers to maintenance that has been delayed beyond its recommended timeframe. If not addressed promptly, it could significantly impact the asset's functionality within the remaining two-year timeframe.

# Areas Within the Scope of the Audit Tested With Exception:

## 1. Life Cycle Asset Management Process

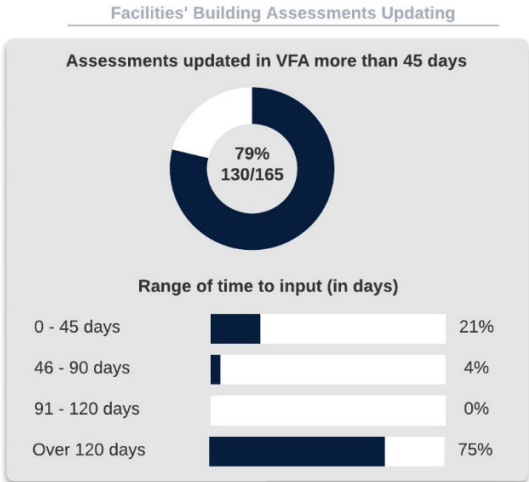
The Life Cycle Asset Management process maximizes the value and usefulness of an asset over its entire lifespan, from acquisition to disposal. This involves managing the asset through various stages, including (but not limited to) an asset’s operation and maintenance.

We conducted testing to determine whether the University has established adequate controls related to the LCAM process. The results of our testing are detailed below.

### Building Assessments

We noted the following two conditions during our analysis of the Facilities’ building assessment process:

- Comprehensive written departmental procedures of the existing LCAM process have not been established. During our review of the LCAM process, we communicated with three staff members engaged in this process and each informed us that they were unaware of any documented LCAM procedures as they relate to the in-house visual asset assessments. However, management subsequently provided us with individual documents with general information, which excludes detailed key procedures of the LCAM process and timeframes for updating assessment inspection entries into VFA.
- 79% of the 165 systems tested had not been updated in VFA within 45 days of their assessment. Facilities’ current practice is to input assessments into VFA within 45 calendar days after their completion.



Without comprehensive written LCAM procedures, assessments may not be conducted in a consistent manner. Although VFA is not the only input for the development of the University's request for deferred maintenance funding, it is an integral component of the process. Therefore, if assessment results are not timely input into VFA, then the risk that critical systems may not be prioritized appropriately on the deferred maintenance funding request list becomes more likely.

### **VFA Building Population**

The record of building assets maintained in VFA is incomplete. We compared a report of all buildings listed within VFA to a list of University buildings published on the FMD website to ensure that VFA encompassed all University buildings. We found a total of seven buildings (out of 114) across all campuses that are owned by the University but were not included in VFA (see Table 1 – Buildings not Listed Within VFA, on page 11). Four (or 57%) of these structures (Field Support Building, Parkview Housing, Parking Garage 5, and Parking Garage 6) are over four years old and have not been subject to the 4-year rolling schedule through the Life Cycle Asset Management Program.<sup>5</sup> However, some of these structures have been subject to independent Facility Condition Assessments (FCA) recently conducted. For instance, DESMAN, a national firm that specializes in parking consulting, recently completed an examination of various components within Parking Garage 5 and Parking Garage 6, including, but not limited to, the floor surface, overhead/vertical surfaces, waterproofing, stairs, and expansion joints. The examination done by DESMAN did not include an assessment of non-parking areas, such as heating, air-conditioning, plumbing, classrooms, food courts, and mechanical systems. We also noted that a formalized process to inform the VFA operator of updates that should be made to assets within VFA has not been established.

The absence of a full population of buildings, along with the lack of formalized controls in the LCAM process may result in significant financial, safety, and compliance risks. Documenting such processes would likewise assist in the event of employee turnover.

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<sup>5</sup> As noted on page 4 in the Background section under Facilities Assessments.

<b>Table 1 – Buildings not Listed Within VFA</b>		
<b>Building</b>	<b>Responsible Unit</b>	<b>Subject to Other Assessment?</b>
Field Support Building	Academic & Student Affairs	No – Facilities indicated the Field Support Building does not contain critical systems.
Parkview Housing	Housing & Residential Life	Yes – An assessment was conducted in November 2021 and addressed critical systems (including, but not limited to plumbing, electrical, and HVAC).
Tamiami Hall	Housing & Residential Life	No – Tamiami Hall opened its doors in 2022.
Greek Housing I	Academic & Student Affairs	Yes – An assessment was conducted in September 2018 and addressed critical systems (including, but not limited to plumbing, electrical, and HVAC).
Greek Housing II	Academic & Student Affairs	Yes – An assessment was conducted in March 2019 and addressed critical systems (including, but not limited to plumbing, electrical, and HVAC).
PG5 Market Station	Parking & Transportation (Mixed Use)	Yes – A condition assessment was conducted in November 2021. The scope of the assessment excluded non-parking areas, such as heating, air-conditioning, plumbing, classrooms, food courts, and mechanical systems. However, the FMD informed us that as refreshes to the food court areas are performed, these systems are assessed.
PG6 Tech Station	Parking & Transportation (Mixed Use)	

## **Recommendations**

Facilities Management should:	
1.1	Develop comprehensive written departmental procedures for the existing Life Cycle Asset Management process to address key processes.
1.2	Ensure all building assessment results are timely input into VFA.
1.3	Ensure all assets are included in VFA.

## **Management Response/Action Plan**

1.1 We concur with the recommendation and written departmental procedures for the LCAM process will be developed.

**Implementation date:** December 31, 2023

**Complexity rating:** Moderate

1.2 We accept that assessment results need to be input in a more timely basis. Results will be input within 45 days of the assessment coordination meeting.

**Implementation date:** Immediately

**Complexity rating:** Routine

1.3 We will ensure to include all E&G assets in VFA and prepare cost proposals for non-E&G assets and submit them to the respective stakeholders. The inclusion of non-E&G assets into VFA cannot be enforced by FMD.

**Implementation date:** June 30, 2024

**Complexity rating:** Complex

## **2. Preventive Maintenance Schedule**

Facilities Management did not always properly document preventive maintenance for select critical life safety system assets. According to Facilities Management, due to limited Plant Operations and Maintenance funding, the FMD prioritizes the preventive maintenance of critical life safety system assets such as fire alarms, fire sprinklers, generators, automatic transfer switches, backflow preventers, and boilers. The scheduling of preventive maintenance for critical life safety system assets is scheduled automatically using the Maximo Computerized Maintenance Management System (“Maximo”).

We judgmentally selected a sample of 14 assets from the critical life safety systems from the Modesto Maidique Campus and traced them to Maximo to verify that the periodic preventive maintenance was scheduled and documented. We found that one (1) of the 14 (7%) assets did not have their annual preventive maintenance scheduled within Maximo, while eight (8) of the 14 (57%) reflected no documentation (within Maximo) of the preventive maintenance being conducted. The FMD subsequently provided documented support demonstrating that all of the maintenance had been conducted (see Table 2 – Preventive Maintenance, on page 14).

The International Facility Management Association (IFMA) emphasizes that preventive maintenance helps to identify and address potential issues before they escalate into larger problems, reducing the risk of unexpected breakdowns and costly repairs. By conducting regular maintenance tasks and equipment testing, facility managers can proactively identify and resolve issues, optimize system performance, and extend the lifespan of assets.

If preventive maintenance is not timely documented within Maximo, then the maintenance system of record may be inaccurate and result in inefficiencies.



**Table 2 – Preventive Maintenance**

<b>Critical Life Safety System Asset</b>	<b>Recommended Frequency</b>	<b>All Maintenance Conducted?</b>	<b>Scheduled in Maximo?</b>	<b>Maintenance Documented in Maximo?</b>
Rafael Diaz-Balart Hall - Fire Alarm Panel	Annually	Yes	Yes	<b>No</b>
Rafael Diaz-Balart Hall - Generator	Monthly	Yes	Yes	<b>No</b>
MANGO - Generator	Monthly	Yes	Yes	<b>No</b>
College of Business Complex - Generator	Monthly	Yes	Yes	<b>No</b>
Ryder Business Building - Fire Alarm Panel	Annually	Yes	Yes	<b>No</b>
Steven & Dorothea Green Library - Fire Alarm Panel	Annually	Yes	Yes	<b>No</b>
Deuxieme Maison - Backflow Preventer	Annually	Yes	<b>No</b>	<b>No</b>
Sandford & Dolores Ziff Education - Fire Alarm Panel	Annually	Yes	Yes	<b>No</b>
Rafael Diaz-Balart Hall - Backflow Preventer	Annually	Yes	Yes	Yes
MANGO - Backflow Preventer	Annually	Yes	Yes	Yes
Steven & Dorothea Green Library - Backflow Preventer	Annually	Yes	Yes	Yes
Paul Cejas Architecture - Backflow Preventer	Annually	Yes	Yes	Yes
Sandford & Dolores Ziff Education - Backflow Preventer	Annually	Yes	Yes	Yes
School of International & Public Affairs - Backflow Preventer	Annually	Yes	Yes	Yes

## **Recommendations**

Facilities Management should:	
2.1	Ensure that preventive maintenance is automatically scheduled for all critical life safety system assets within Maximo.
2.2	Timely document the completion of preventive maintenance on critical life safety systems within Maximo.

## **Management Response/Action Plan**

2.1 We concur with the recommendation. A thorough verification of work orders for critical life safety systems for each building will be conducted.

**Implementation date:** January 31, 2024

**Complexity rating:** Complex

2.2 We concur with the recommendation. The process to upload documentation into Maximo will be improved, and a mobile solution for field testing and inspection will be implemented.

**Implementation date:** July 31, 2024

**Complexity rating:** Complex

### **3. Monitoring Project Schedules and Financials**

Project schedules are established for projects of \$75,000 or more, and for select projects depending on their scope, visibility, cost, and priority. Project managers enter their hours into the Facilities' time-tracking database biweekly. Each month, the Assistant Director of Construction meets with the Project Managers to discuss the status of their projects and to identify any potential obstacles. Additionally, on a semi-annual basis, the Facilities' Construction Accountant performs a quality assurance audit of 10% of closed projects to ensure that all documentation relevant to the reviewed projects are on file. We reviewed the existing monitoring processes for state-funded deferred maintenance projects, and the results of our testing are noted below.

#### **Schedule Management**

The FMD lacks a system with scheduling capabilities, including the ability to develop schedules that are tied to key milestones and flagging schedule deviations and potential project delays. Rather, Facilities employs a manual process for evaluating the status of each project monthly.

We randomly selected two deferred maintenance projects to determine whether the Assistant Director of Construction met routinely with the Project Managers to discuss the status of their projects and noted no exceptions.

#### **Financial Monitoring**

Facilities Management does not have a robust Construction Management System that integrates with the University's enterprise system or that provides report building solutions. As a result, the FMD extracts financial data from PantherSoft and manually compiles construction management reports ("BR Logs" and "Monthly Summary Reports"). Unlike PantherSoft, which groups all expenses together by appropriation, the internal reports distinguish expenses for the life of each individual project. Facilities informed us that a reconciliation of the Monthly Summary Report against the General Ledger is an informal process and is conducted at minimum, monthly. However, we were unable to confirm the existence of this control or the stated frequency of its occurrence, as each reconciliation is over-written once the next reconciliation is performed, and the documentation to establish an audit trail was not archived or available for our review. In addition, there is no documentation of any review of the outcome by a second individual.

Notwithstanding the aforementioned control deficiency, during our walkthrough of this process, Facilities demonstrated how they compare their Monthly Summary Report to the Budget Detail in PantherSoft to identify discrepancies. While these reports are used internally by Facilities Accounting to provide decision makers with timely data, best practices and effective internal controls would include timely and periodic reconciliations of management reports to control records and/or totals and maintaining a record of the reconciliations to ensure discrepancies are noted and corrected.

Pursuant to COSO (Committee of Sponsoring Organizations of the Treadway Commission), *Internal Control Integrated Framework* and the U.S. General Accountability Office, *Standards for Internal Control in the Federal Government*, management should perform on-going monitoring of the design and operating effectiveness of the internal control system as part the normal course of operations. Ongoing monitoring includes regular management and supervisory activities, comparisons, reconciliations, and other routine actions.

We selected five (of 44) deferred maintenance projects and validated that BR Logs contained budget and funding information throughout the life of each project. However, due to the lack of detail within PantherSoft, we were unable to corroborate that the expenses and revenues on each log were complete.

Without a formal reconciliation process, both PantherSoft financial data and the internal reports utilized by the FMD for decision-making purposes may omit or contain erroneous transactions without being detected.

**Recommendations**

Facilities Management should:	
3.1	Consider implementing a robust Construction Project Management System that encompasses all key processes of facilities management and is fully integrated with PantherSoft.
3.2	Formalize the process for reconciling the internal reports to the General Ledger. The documented process should include, but not be limited to, establishing a specific schedule for performing the reconciliations, guidance on the handling of any identified differences, supervisory review, and records retention protocol for the periodic reconciliations.

**Management Response/Action Plan**

3.1 We concur with the recommendation. We are working with the Office of the Controller to finalize ITN No. 023-00112 for an Owner's Construction Project Management Software System ("OCMS"). The following steps will be completed:

- Finalize ITN: 2 Months (estimate)
- Receive and review proposals: 3 Months (estimate)
- Presentations and Committee deliberations: 3 Months (estimate)
- Project Kick-off and design development: 6 Months (estimate)
- Implementation and Training: undetermined – this is part of the information we will gather from the proposals: 1 Year (estimate)

**Implementation date:** September 30, 2025

**Complexity rating:** Exceptional

- 3.2 We agree with the audit report's observation that the University "does not have a robust Construction Management System that integrates with the University's enterprise system or that provides report building solutions..." While this is a shortcoming in the University's official system of record, we highlight that it is critical to understand the nature and function of the two distinct construction spreadsheets FMD uses, i.e., "the BR Log" and the Monthly Executive Summary ("Bible").

The BR Log and accompanying Bible are internal management reports based on Excel spreadsheets developed by Facilities Management. The BR Log reflects detailed data that is in the General Ledger, presenting it in a more readily usable format. The Bible is the monthly summary of that detailed data. The two reports are not, were never intended to be, and should not be considered an "Official Book of Record" for financial statement preparation or financial records. They are internal documents for Facilities Management to more readily and easily view the progress and status of construction projects.

The BR Log undergoes daily updates encompassing all construction activity including requisitions, purchase orders, contracts, invoices, change orders, etc. As a live report, it is subject to continuous changes, updates, and revisions by the three (3) members of the FMD Construction Accounting Team. Because it is live and because it is an Excel spreadsheet, not a database, it cannot be formally reconciled. The Bible, on the other hand is a monthly summary report that is reconciled at a specific point in time after the General Ledger closes each month and it is substantiated by the preserved historical records dating back to 2004. Furthermore, the bottom-line figures presented in the monthly summary can be reconciled with PantherSoft for additional validation. ***[Office of Internal Audit Comment: We appreciate the FMD's statement that the "Bible" is reconciled at a specific point in time each month. As a point of clarification, while the FMD preserves a copy of the Monthly Summary Reports, these reports are the original reports and are not annotated or otherwise affected to demonstrate or document that a reconciliation to the General Ledger was performed. For example, the preserved reports do not include any notation or support tying back the amounts to the system of record (General Ledger), and do not document or explain any discrepancies found, or secondary reviews conducted.]***



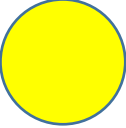




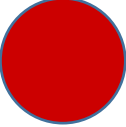

The long-term fix is to acquire an OCMS that will fully integrate into the PantherSoft enterprise system. This integration will streamline the processes and consolidate all relevant data within PantherSoft and eliminate the need for redundant procedures. That fix will take several years to implement as outlined in our response to Recommendation 3.1.

As an immediate measure, however, we can formalize the reconciliation of the monthly summary report known as “the Bible.” We note that the report acknowledges the informal reconciliation is already being performed monthly as a minimum. We further note that the audit was unable to identify any shortcomings, errors, or discrepancies in the process already in place.

**Implementation date:** August 31, 2023

**Complexity rating:** Complex

## APPENDIX I – COMPLEXITY RATINGS LEGEND

Legend: Estimated Time of Completion		Legend: Complexity of Corrective Action	
	Estimated completion date of less than 30 days.		<b>Routine:</b> Corrective action is believed to be uncomplicated, requiring modest adjustment to a process or practice.
	Estimated completion date between 30 to 90 days.		<b>Moderate:</b> Corrective action is believed to be more than routine. Actions involved are more than normal and might involve the development of policies and procedures.
	Estimated completion date between 91 to 180 days.		<b>Complex:</b> Corrective action is believed to be intricate. The solution might require an involved, complicated, and interconnected process stretching across multiple units and/or functions; may necessitate building new infrastructures or materially modifying existing ones.
	Estimated completion date between 181 to 360 days.		
	Estimated completion date of more than 360 days.		<b>Exceptional:</b> Corrective action is believed to be complex, as well as having extraordinary budgetary and operational challenges.

\*The first rating symbol reflects the initial assessment based on the implementation date reported by Management, while the second rating symbol reflects the current assessment based on existing conditions and auditor's judgment.

## **APPENDIX II – OIA CONTACT AND STAFF ACKNOWLEDGMENT:**

**OIA contact:**

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**Contributors to the report:**

In addition to the contact named above, the following staff contributed to this audit in the designated roles:

Brian Del Pino (auditor in-charge);  
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Manuel Sanchez (supervisor and reviewer); and  
Vivian Gonzalez-Ferradaz (independent reviewer).



## **Definition of Internal Auditing**

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.