



# Facilities Presentation to the Clinical Center Research Hospital Board (CCRHB)

By Dan Wheeland, P.E. Director,  
Office of Research Facilities

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## *Announcements and Agenda*

- Positive Results from Quarterly Meetings with Congressional Appropriations Committee Staffs
  - We had previously reported an increase in the Buildings & Facilities appropriation from \$200M (FY21) to \$250M (FY22).
  - We are now proud to announce an increase from \$250M (FY22) to \$350M (FY23).
- Project Updates

# C104935 Center for Cellular Engineering (CCE) Cell Processing Facility



**Identified Risk/Impact:** Inadequate amount of cGMP-compliant space to accomplish critical research objectives.

**Project Benefit / Risk Mitigation Strategy:** New facility to support DTM with additional aseptic Cell Processing and Engineering.

**Funding Status:** Funded

**Schedule Status:**

- November 2020: Construction completed.
- April 2022: Commissioning, Qualification, and Validation (CQV) completed.
- June 2022: Environmental Monitoring Performance Qualification (EMPQ).
- *January 2023: Various punchlist items completed.*
- *Occupancy by CCE planning underway.*
- *Follow-on projects for Mechanical Systems Uninterruptible Power System, Enhanced Humidification, and Exhaust Stack to follow 12E completion and occupancy.*

# C105559 Pharmacy and Permanent Intravenous Admixture Unit (P-IVAU) Renovation



Compounding Room with Biosafety Cabinet



Compounding Room with Isolator

**Identified Risk/Impact:** Interim IVAU is only temporary, is inadequate in size and there is no backup plan in case of a facility emergency. Will involve a new penthouse to house dedicated air handling equipment.

**Project Benefit / Risk Mitigation Strategy:** Improved safety and compliance.

**Funding Status:** Funded.

## **Schedule Status:**

- December 2020: Design-Build contract awarded to DPR Construction in September 2019. Completed demolition work in July 2020. Final design completed in December 2020.
- May 2022: The new Pharmacy Inpatient and Outpatient areas were completed in February 2022. Pharmacy began operations in May 2022.
- July 2022: The new IVAU reached construction completion and began commissioning.
- *March 2023: Installation, Operational, and Performance (IOQ) Qualification of HVAC System*
- *April 2023: Air Visualization Studies*
- *May - June 2023: Environmental Monitoring Performance Qualification (EMPQ) and activation process for the new facility.*

## C100883 Radiopharmacy and Cell Labeling Facility



Radioactive Material (RAM) Cleanroom Concept Picture



Cell Labeling Cleanroom Concept Picture

**Identified Risk/Impact:** Outdated and inadequate nuclear medicine facilities, negatively impacting mission accomplishment.

**Project Benefit / Risk Mitigation Strategy:** Renovated and modernized aseptic processing facilities to support the evolving mission of the Nuclear Medicine Department.

**Funding Status:** Funded for Fiscal Year 2023.

### **Schedule Status:**

- *February 2023: Completion of design.*
- *March 2023: Construction solicitation planned for release.*
- *May 2023: Construction contract award.*
- *June 2023: Construction anticipated to take 18 months.*



## C112347 – Sterile Processing Upgrades



**Identified Risk/Impact:** Infection control, sterile processing production delays, and regulatory compliance.

**Project Benefit / Risk Mitigation Strategy:** Improved safety, production, workflows, and regulatory compliance.

**Funding Status:** Partially funded.

**Schedule Status:**

- *Two new surgical steam sterilizers in B1 Level have been replaced.*
- *Once Sterile Processing relocates to the B1 Level, the current sterile processing area on the 2<sup>nd</sup> Floor will be renovated and specialty equipment replaced.*





# C100663 E-Wing Renovation Including Cell Processing



**Identified Risk/Impact:** Outdated and inadequate facilities, negatively impacting mission accomplishment.

**Project Benefit / Risk Mitigation Strategy:** Renovated and modernized facilities to support cutting edge research.

**Funding Status:** Funded

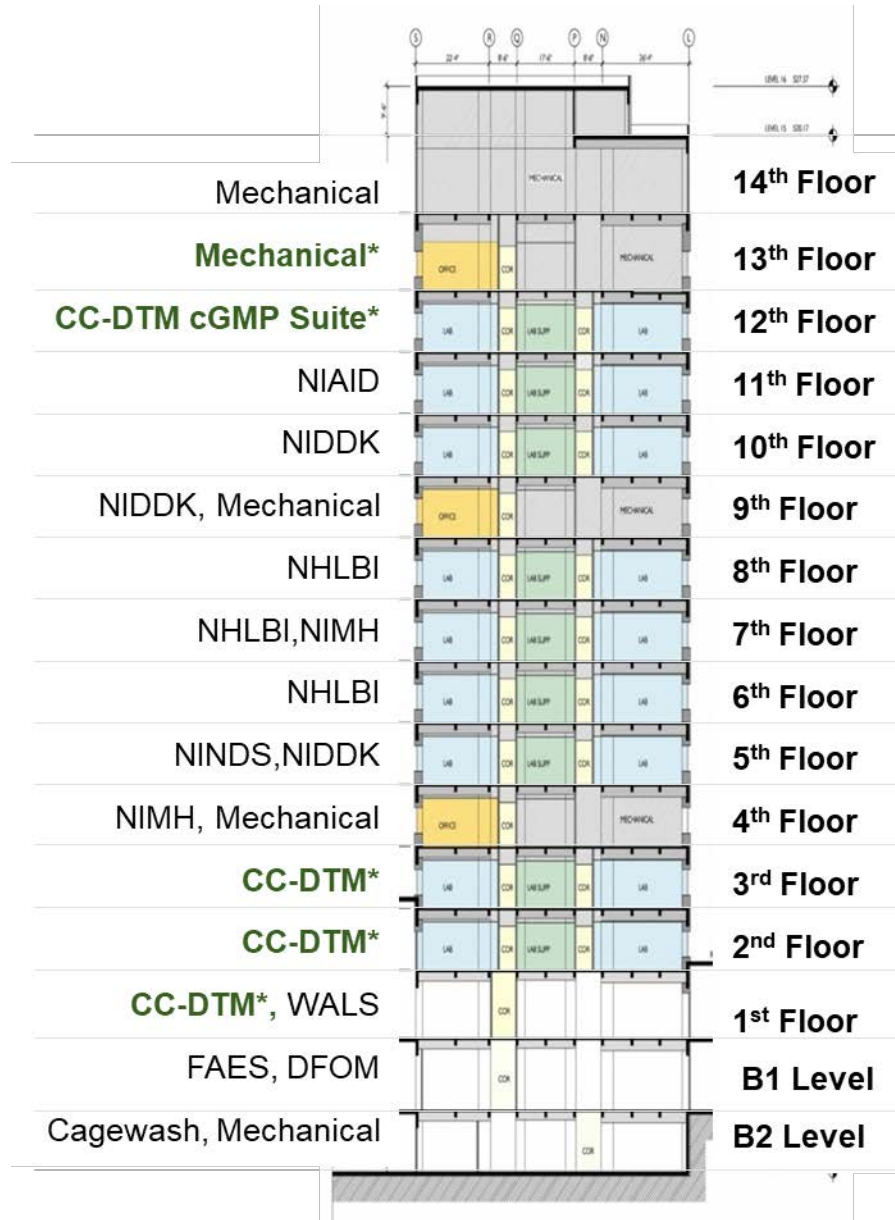
**Schedule Status:**

- June 2023: Estimated completion of construction
- October 2023: Estimated completion of validation of cGMP space for the Center for Cellular Engineering





# C100663 E Wing Cross Section and Housing Plan



\*Clinical Center space



# *C103157 Surgery, Radiology and Laboratory Medicine (SRLM) Building, including Catheterization Lab and Interventional Radiology*



Looking from north to south



Looking from west to east

**Identified Risk/Impact:** Clinical Center Departments of Perioperative Medicine, Laboratory Medicine, Radiology and Imaging Sciences, and the NHLBI Cardiac Catheterization Program are housed in 1980-era obsolete space with mechanical, electrical, and plumbing infrastructure that cannot be economically upgraded. Leaks and floods occur regularly in the existing space.

**Project Benefit / Risk Mitigation Strategy:** Safe, compliant, maintainable, and flexible facilities to support cutting-edge research and optimal patient care.

**Funding Status:** Design-Build Contract is funded and awarded.

**Schedule Status:**

- March 2022: Design-Build Contract for the new addition was awarded.
- July 2028: Scheduled completion date.



## *C103157 Surgery, Radiology and Laboratory Medicine (SRLM) Building, including Catheterization Lab and Interventional Radiology*

- **Phase 0** (preparatory site logistics) started January 9, 2023, including:
  - Closure of the Center Drive gate at Old Georgetown Road
  - Construction of Temporary Vehicle Inspection Facility
  - New Driveway for the Northwest Child Care Center
  - ACRF Garage Preparations
- **Phase 1** (site utilities, excavation, SOE, foundation, etc.) – 95% design submission under review
- **Phase 1A** (garage and tunnel utility rerouting & egress) – Final submission under review
  - Fencing and temporary walls are being erected in ACRF Garage for some selective demolition under Phase 1A.



# C103157 Surgery, Radiology and Laboratory Medicine (SRLM) Building, including Catheterization Lab and Interventional Radiology

- Expected impact to traffic and parking requires mitigation measures
  - ✓ October 2021: Opened East Drive to two-way traffic (provides better access to MLP 10)
  - ✓ November 2021: Communications Campaign
  - ✓ Feb 22, 2022: Convert Lot 4A to Patient Valet Lot
  - ✓ Feb 22, 2022: Convert MLP 9 for Building 10 staff only
  - ✓ Feb 22, 2022: New Express Shuttle to connect Building 10 to Parking Lots 41 & 42
  - ✓ April 10, 2022: Allow exiting in afternoons from North Drive
  - ✓ April 2022: Building 60 & Safra Family Lodge Temporary Accessway complete
  - ✓ Jun 2022: New sidewalk installation connecting the Safra Lodge with Center Drive complete
  - ✓ September 2022: Stacked Parking to commence at Lot 10H
  - ✓ October 24, 2022: Lincoln Drive Gate Project complete
  - ✓ January 9, 2023: Center Drive at Old Georgetown Road gate closed
  - ✓ January 9, 2023: 206 ACRF parking spaces closed
  - ✓ January 9, 2023: Montgomery County adjusted the timing of the traffic lights along Old Georgetown Road to maximize exiting times via South and Lincoln Drives
  - ✓ January 9, 2023: Wayfinding application Waze updated
  - ✓ January 2023: Lot 18 Visitor Parking opened. March 2023, the parking vendor will begin charging for parking
  - March 6, 2023: Portions of Center Drive and Convent Drive to close; ACRF Parking Garage P1 Entrance to close





## *C106418 Electrical Switching Station and Emergency Generators*



**Identified Risk/Impact:** The electrical infrastructure serving the Building 10 Complex is in poor condition and is inadequate in capacity to serve the SRLM.

**Project Benefit / Risk Mitigation Strategy:** Improved reliability and capacity of electrical equipment.

**Funding Status:** Funded

**Schedule Status:**

- December 2025: Scheduled completion date.





## C100231 Black Start of Cogeneration Plant



**Identified Risk/Impact:** Loss of steam generation/hot water/chilled water distribution due to power outage.

### **Project Benefits / Risk Mitigation**

**Strategy:** In a regional power outage, NIH will be able to start the 23-megawatt Cogeneration plant to 1) supply power to boilers to generate steam to buildings during an area power outage; and 2) supply power to chillers to generate chilled water for critical loads, including patient care.

**Funding Status:** Funded

**Schedule Status:** *June 2023: Estimated completion of construction*



## Summary

- The recent increase in the Buildings & Facilities appropriation has provided NIH an opportunity to improve the condition of its facilities, including our patient care facilities, as well as the underlying infrastructure supporting health care.
- NIH is investing in resilient infrastructure to ensure that its critical functions can continue, even in the event of temporary interruptions in electrical and water service by local utility providers. However, despite these investments in preparedness, reliability, and resilience, threats such as IT security require us to remain vigilant. We will never reach a zero-risk outcome.