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TEAM: COLLABORATIVE DESIGN OF THE VALKENBERG FORENSIC PRECINCT

SVA

Alex van den Berg
Executive – Health & Science Lead



Infrastructure

James Claassen
Chief Architect - Health Infrastructure

Meyer & Associates
architects. urban designers



Tiaan Meyer
Director

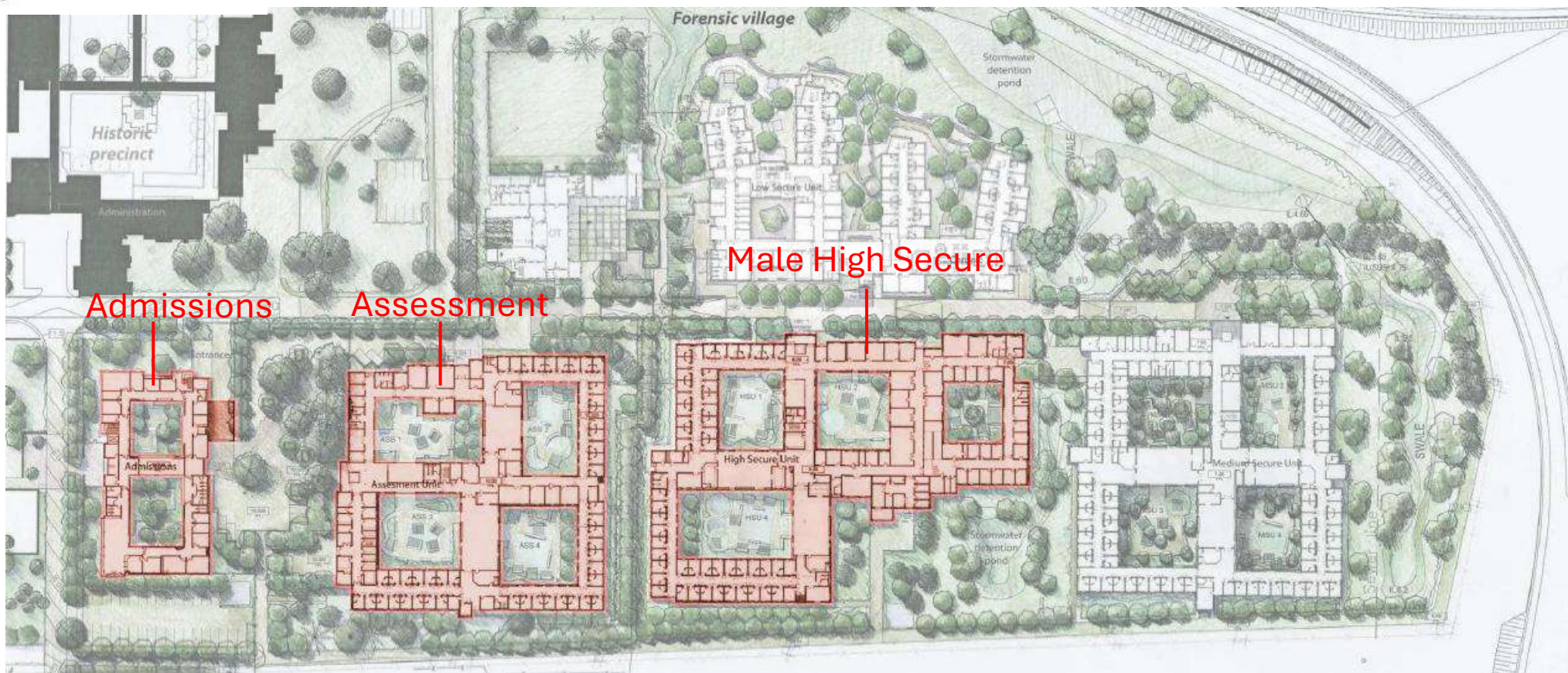


Health & Wellness

Alan Middleton
Chief Architect/Senior Prog. Manager
Infrastructure Programme Delivery

- Specialised **forensic psychiatric facilities** are unique and highly complex.
- The project required balancing:
 - Patient dignity
 - Safety and security
 - Operational flexibility
 - Heritage constraints
 - Long-term sustainability
- Located within a live psychiatric hospital campus

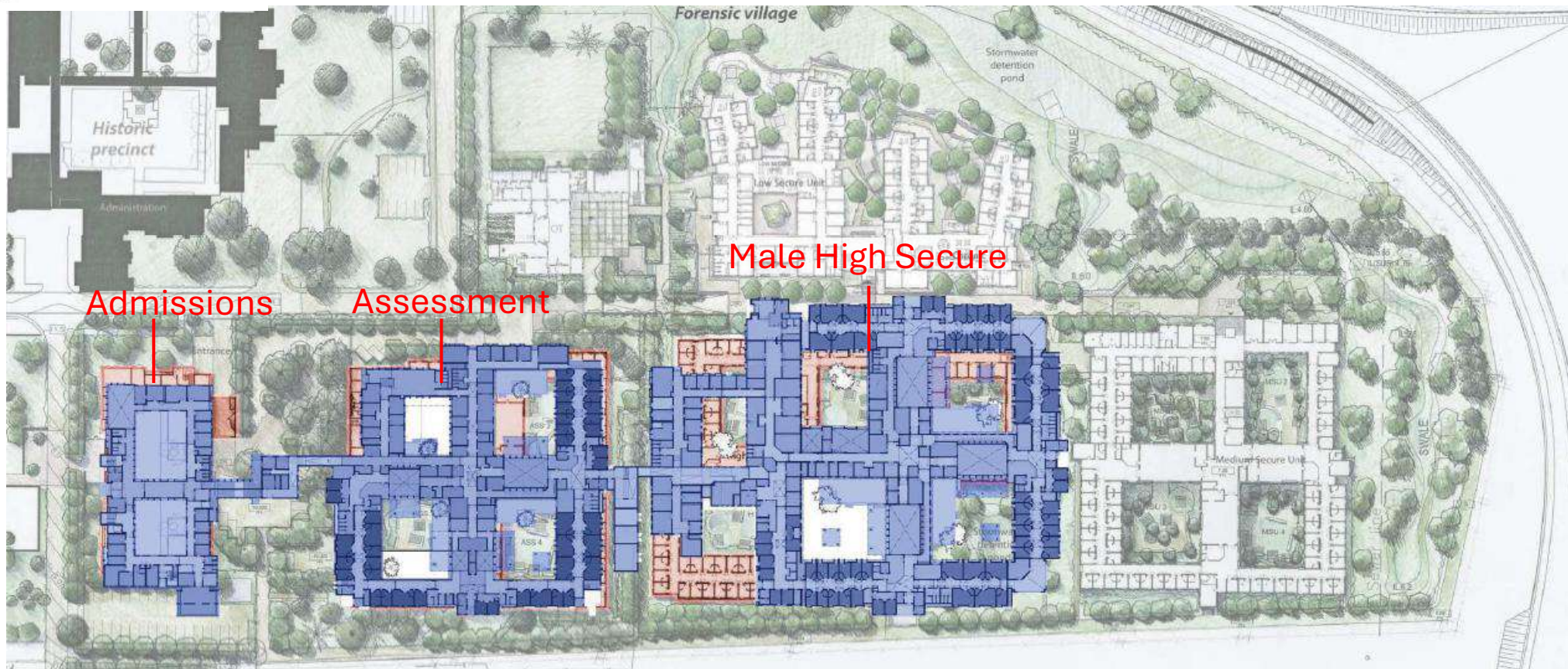
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Where to start?



- Review of an earlier design against updated requirements
- Evolving norms and standards
- Contemporary operational thinking based on recent APU development in Western Cape

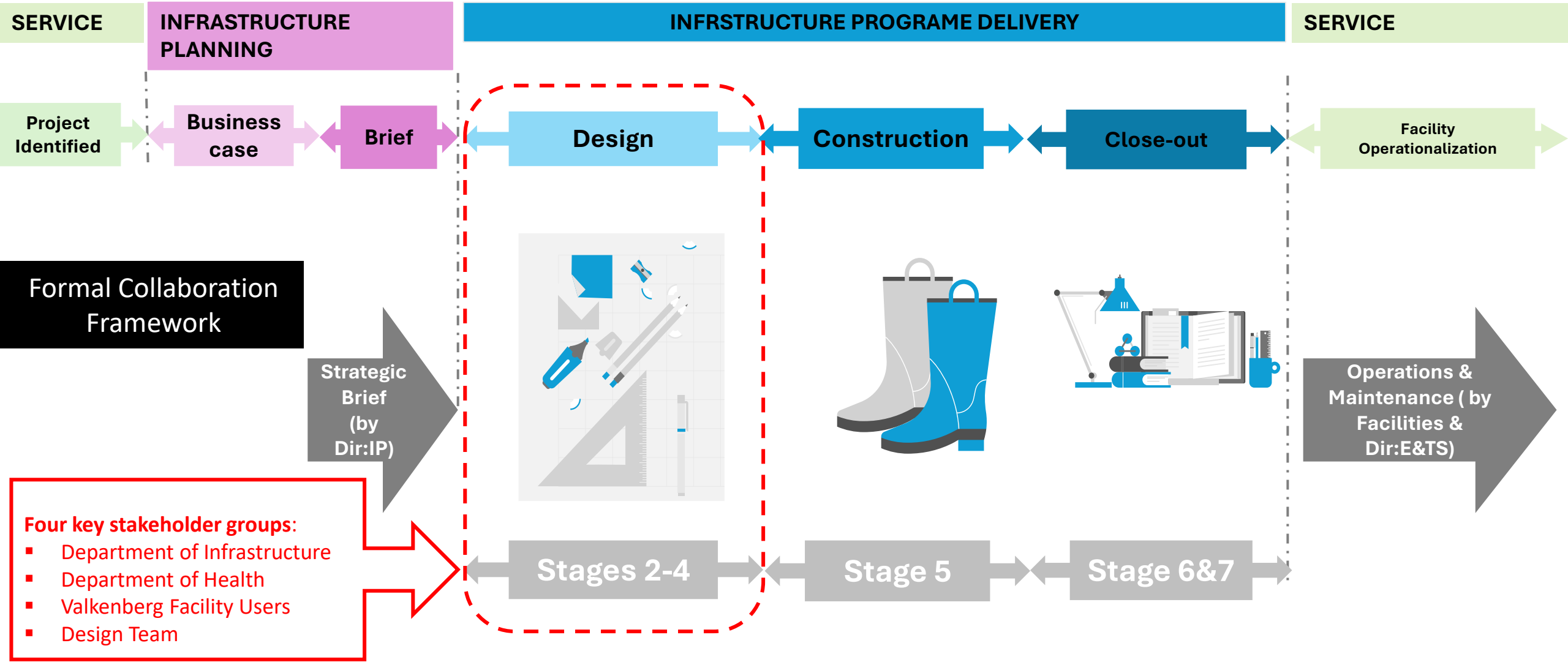


Approach

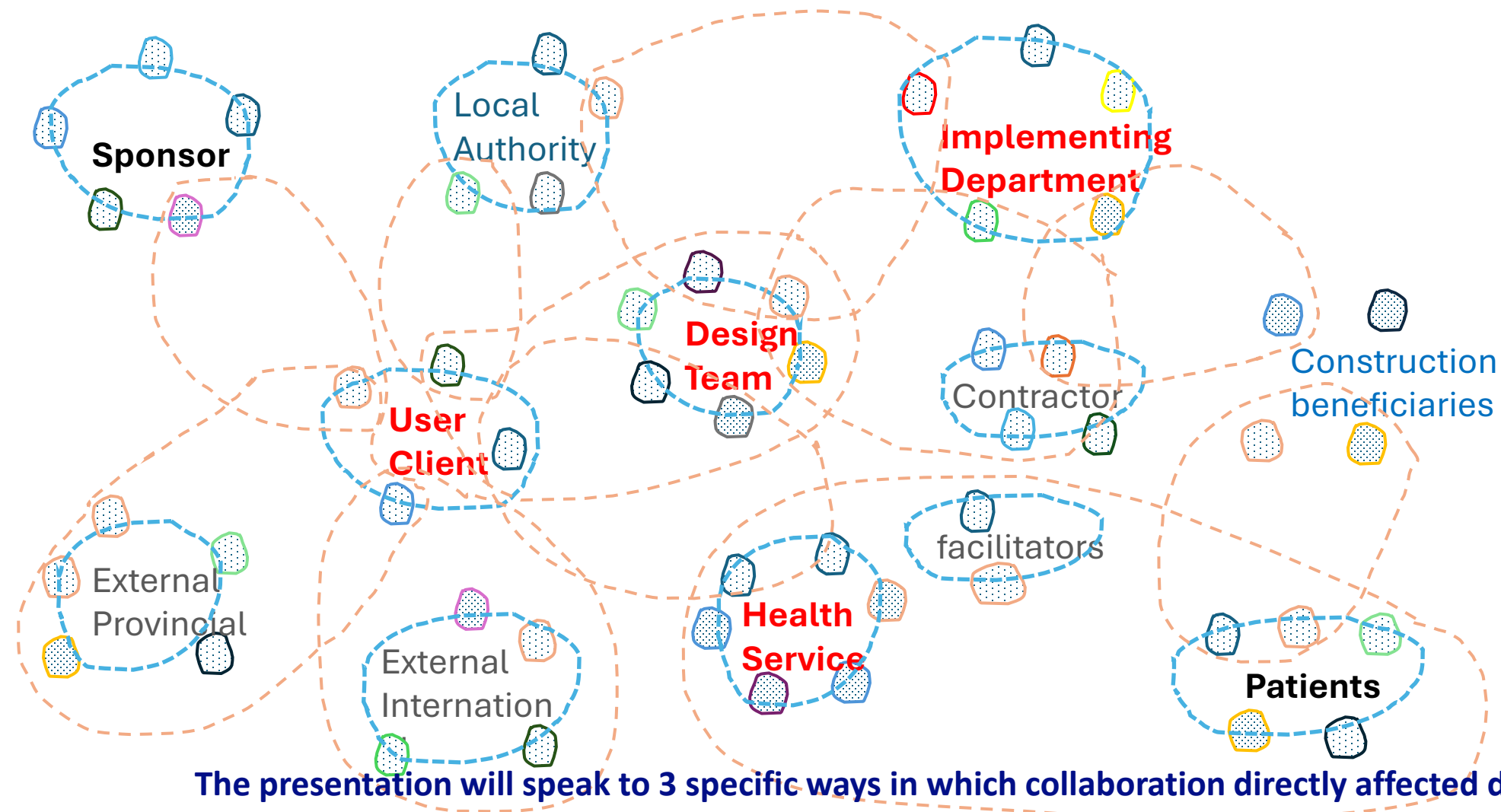
“The challenge was not redesigning a building. The challenge was aligning multiple perspectives around a shared solution.”

- Aligned with original building Type and Urban design

Infrastructure Programme Delivery Process



“Collaboration is not a consultation exercise. It is a continuous design process in itself.”



Broader Collaboration Framework

The presentation will speak to 3 specific ways in which collaboration directly affected design outcomes

SVA + Meyer & Associates joint appointment joint responsibility.

SVA led functional & clinical planning of the facility

M&A led External envelope and site context

Assisted well by rest of the design team

“Design evolved through repeated testing and refinement.”

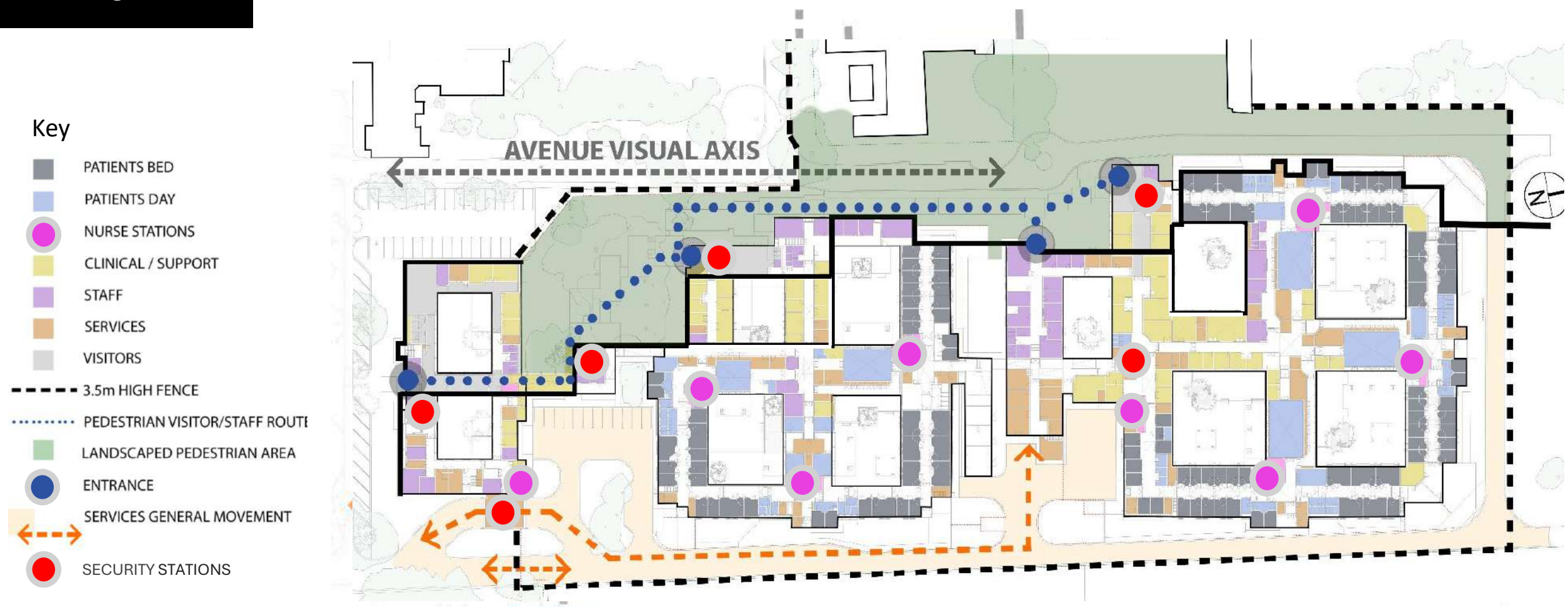
Design Collaboration

- Formal design reviews with DoI and DoH&W throughout
- Clinical workshops and User engagement sessions
- Operational reviews incl. Fire, Security, ICT and HT
- Site visits to APU's being completed in WC
- Leading to ongoing design refinement



Challenge 1

Zonal Segregation of a Forensic Psychiatric Facility for Safety and Security

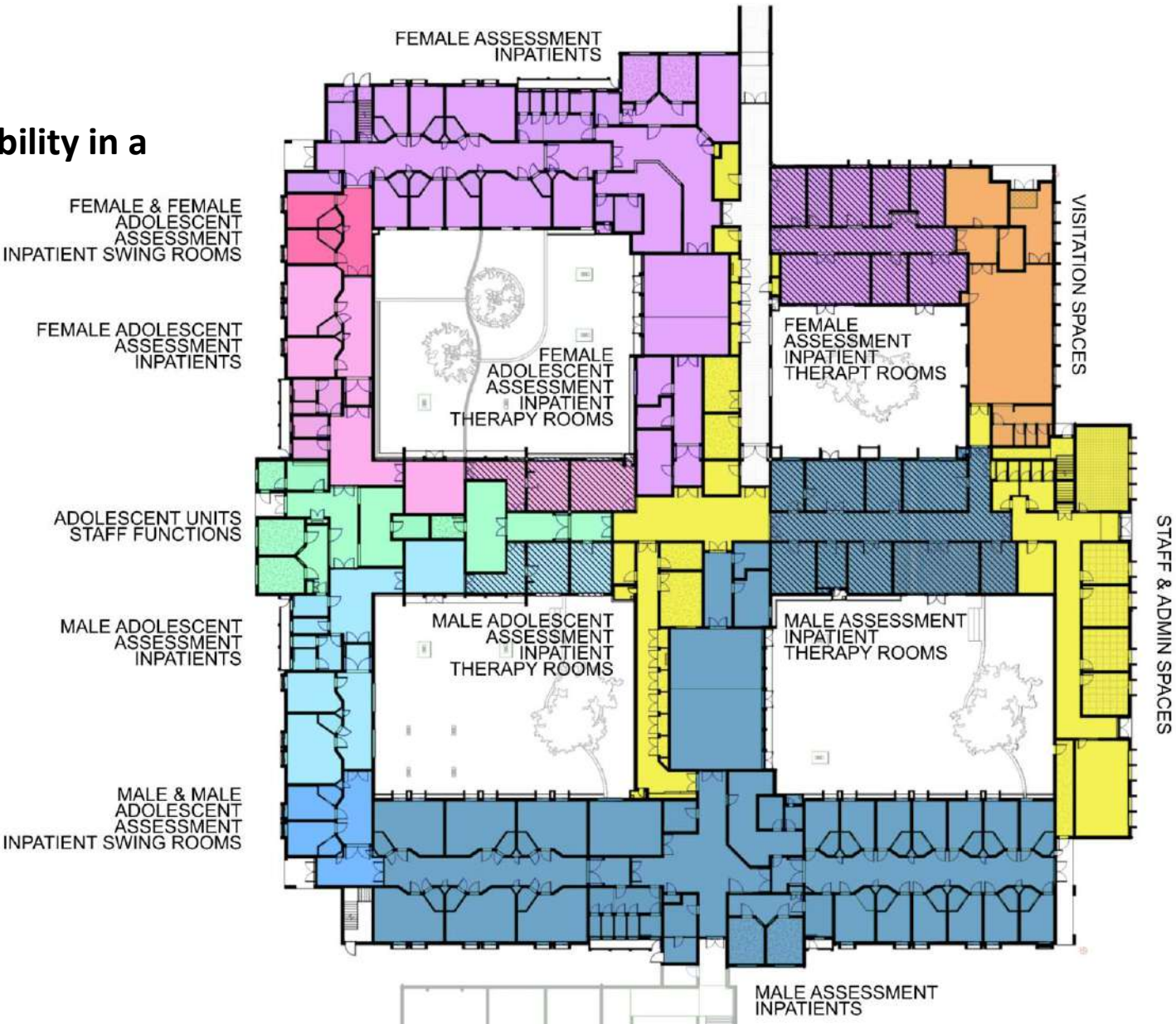


Challenge

Designing For Operational Flexibility in a high secure environment

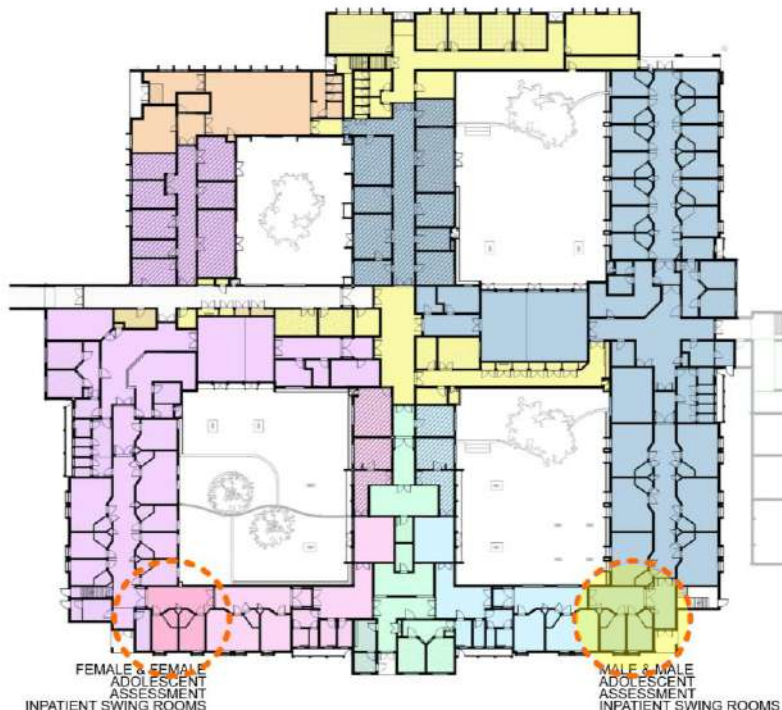
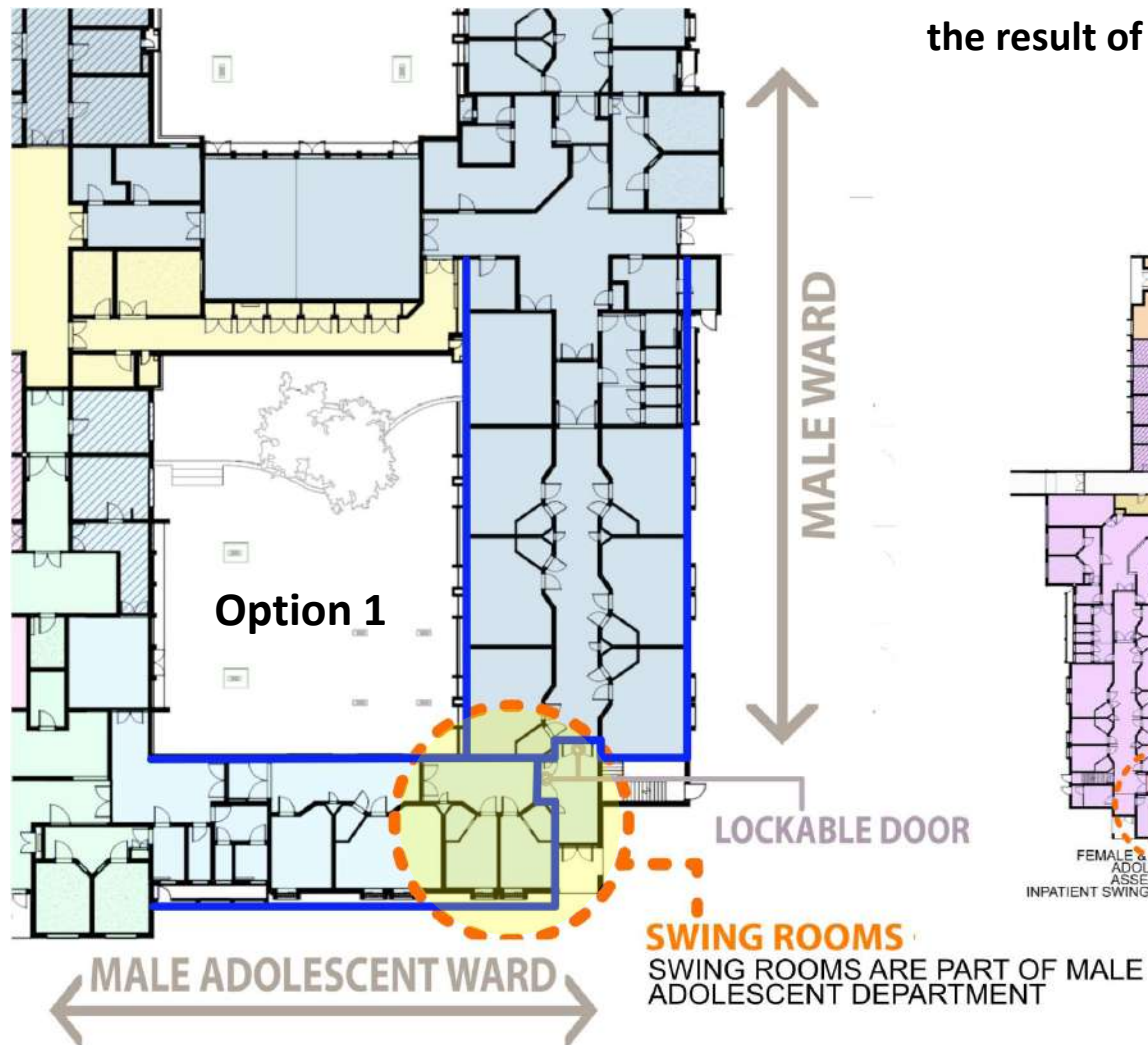
Observation unit: High secure segregation and safety requirement limits flexibility to accommodate fluctuating patient type numbers between Male & Female and Adult & Adolescent

- STAFF & ADMIN SPACES
- VISITATION SPACES
- ADOLESCENT UNITS
STAFF FUNCTIONS
- FEMALE ASSESSMENT
INPATIENTS
- FEMALE ASSESSMENT
INPATIENT THERAPY ROOMS
- FEMALE ADOLESCENT ASSESSMENT
INPATIENTS
- FEMALE ADOLESCENT ASSESSMENT
INPATIENT THERAPY ROOMS
- FEMALE & FEMALE ADOLESCENT ASSESSMENT
INPATIENT SWING ROOMS
- MALE ASSESSMENT
INPATIENTS
- MALE ASSESSMENT
INPATIENT THERAPY ROOMS
- MALE ADOLESCENT ASSESSMENT
INPATIENTS
- MALE ADOLESCENT ASSESSMENT
INPATIENT THERAPY ROOMS
- MALE & MALE ADOLESCENT ASSESSMENT
INPATIENT SWING ROOMS



“Operational flexibility is not an architectural feature. It is the result of clinicians, operators and designers jointly planning for eventuality.”

Outcome 1



Collaborative workshops led to:

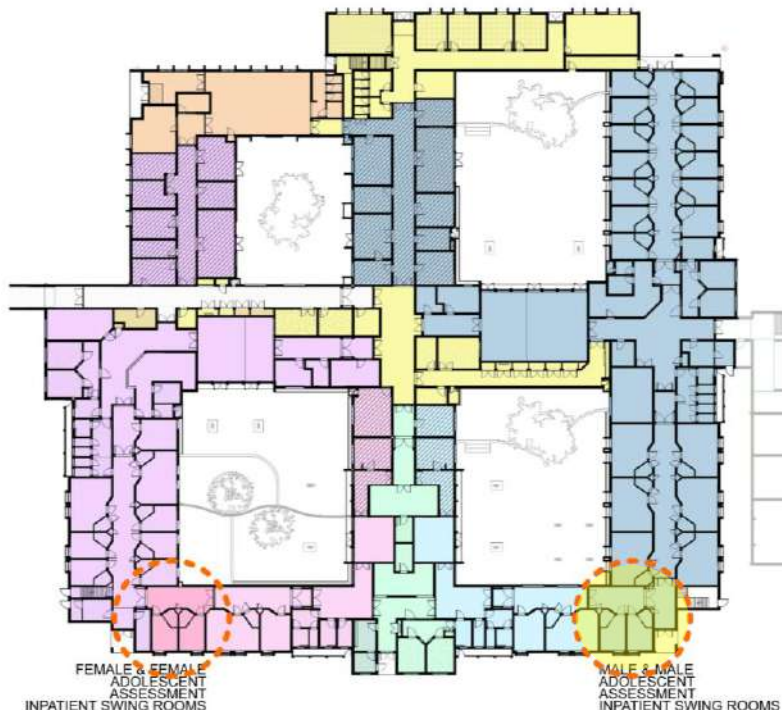
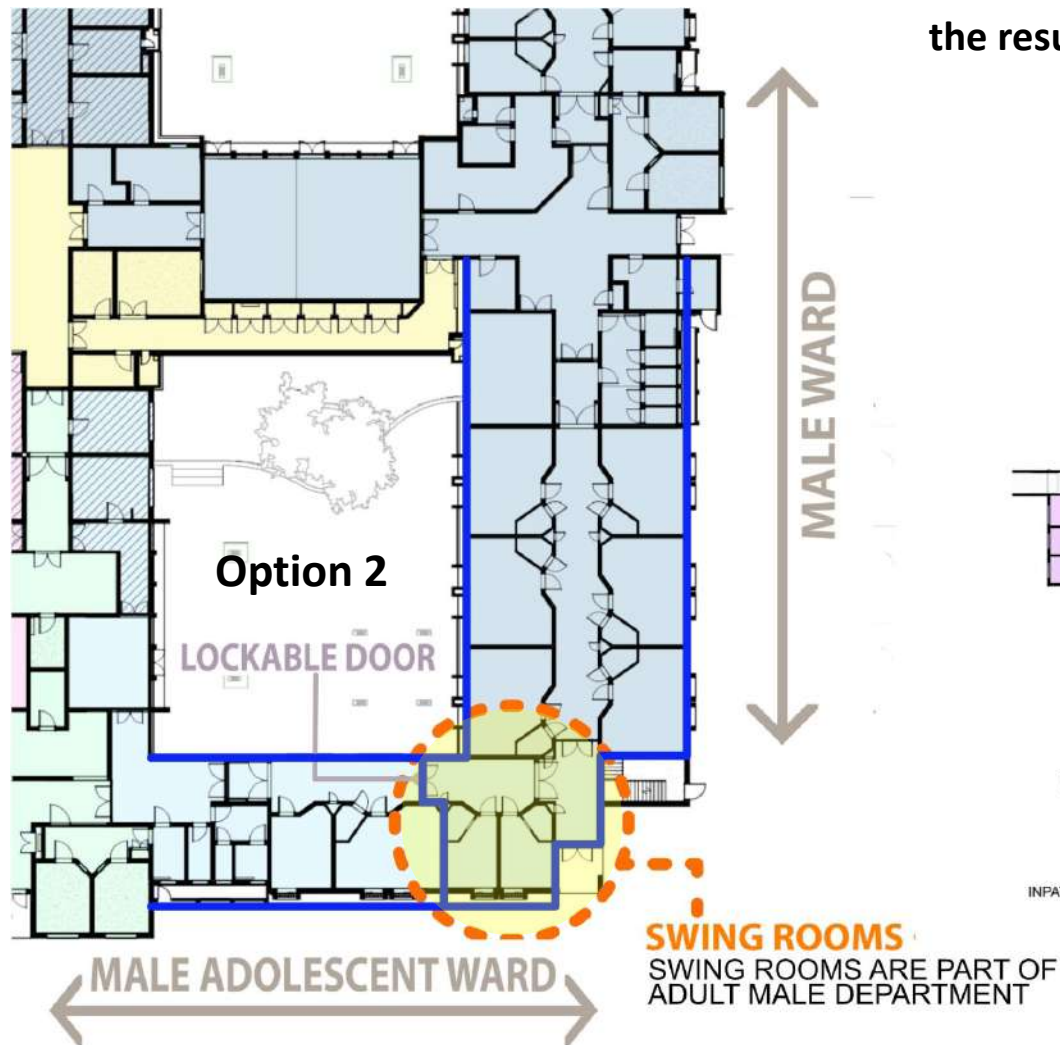
- Swing accommodation
- Flexible occupancy arrangements
- Modular ward planning

Option 1 Patient numbers:

- Adult Males - 31
- Adolescent Males – 6
- Adult Females – 12
- Adolescent Females - 6

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Outcome 1



Collaborative workshops led to:

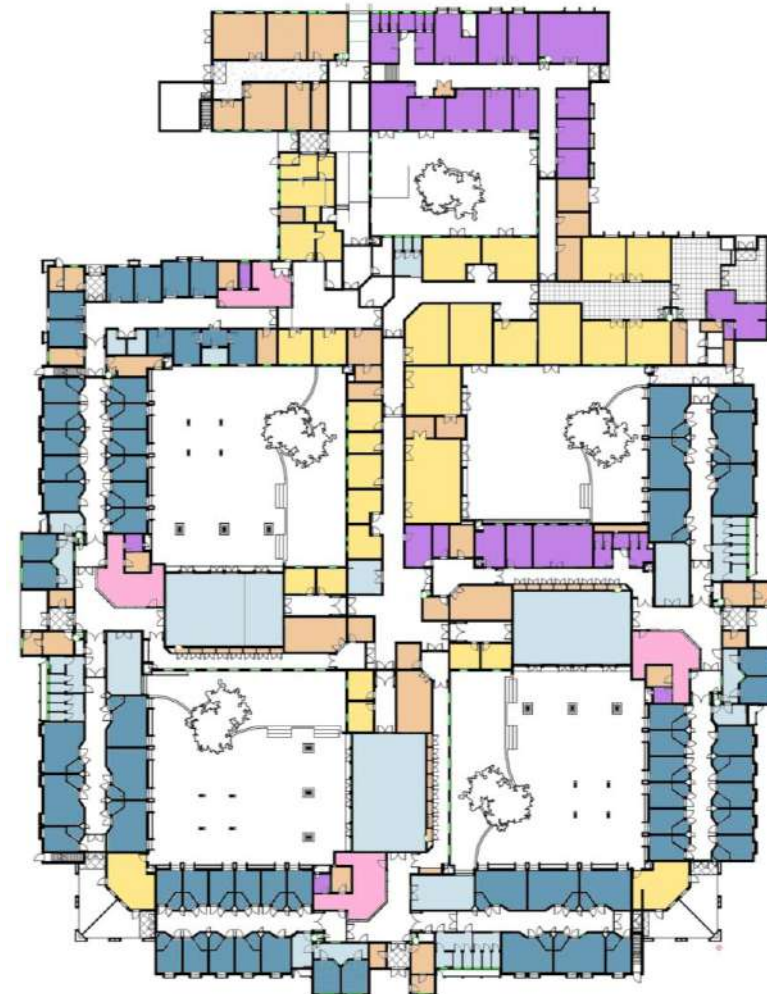
- Swing accommodation
- Flexible occupancy arrangements
- Modular ward planning

Option 2 Patient numbers:

- Adult Males - 33
- Adolescent Males – 4
- Adult Females – 14
- Adolescent Females - 4

Challenge 2

Patient Assessment, Safety, Dignity and Security Through Options And Adaptability



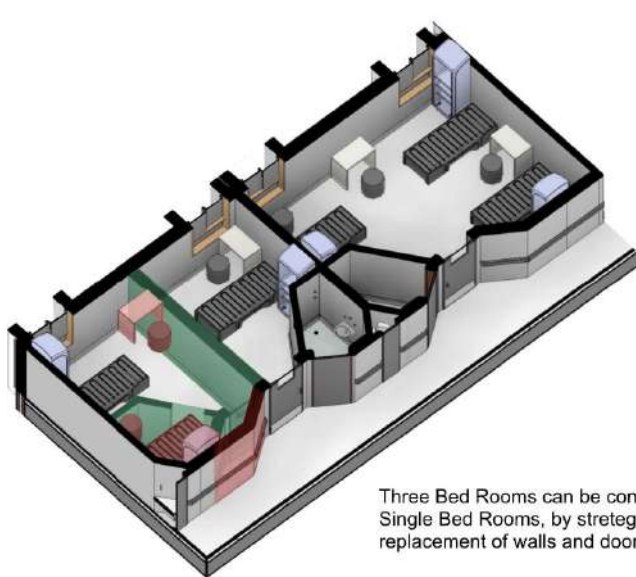
- No single room type is suitable every patient.
- Different treatment approaches require different accommodation models.

“Standardisation & modularisation creates efficiency, but thoughtful variation creates better clinical environments whilst supporting future adaption should needs change”

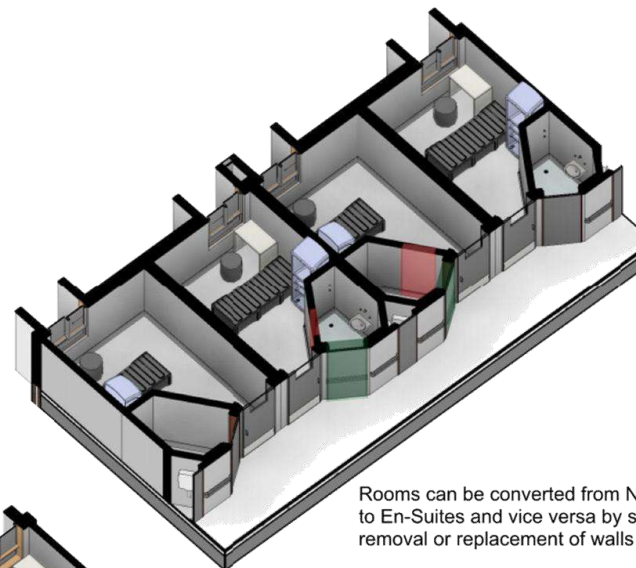
Outcome 2

Collaborative discussions with Clinicians led to:

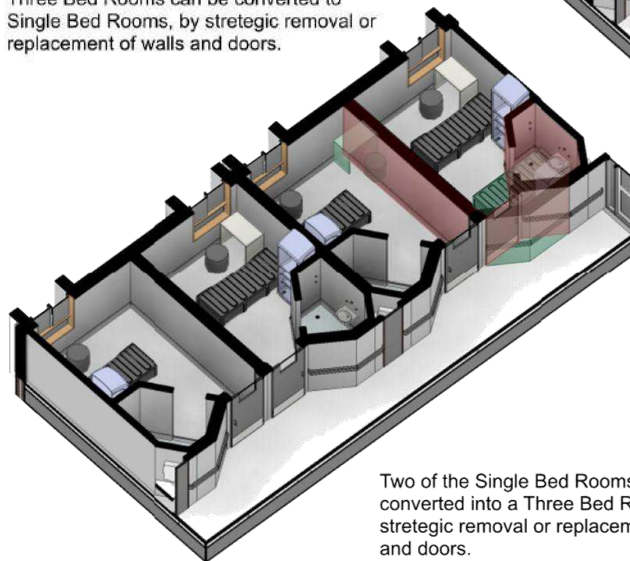
- Modular room clusters
- Single rooms
- 3 bed shared rooms
- Ensuite and “Nonsuite” washrooms
- Shared ablutions and strategies during times of required isolation



Three Bed Rooms can be converted to Single Bed Rooms, by strategic removal or replacement of walls and doors.



Rooms can be converted from Non-Suites to En-Suites and vice versa by strategic removal or replacement of walls and doors.

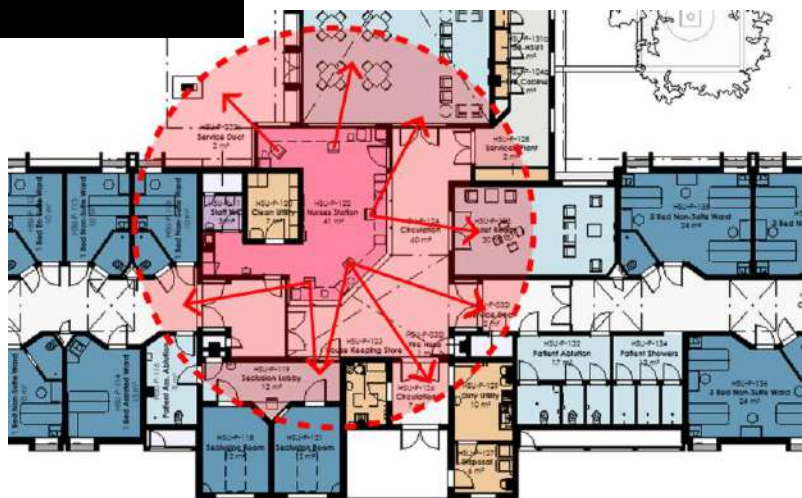


Two of the Single Bed Rooms can be converted into a Three Bed Room, by strategic removal or replacement of walls and doors.



Challenge

Rethinking Observation

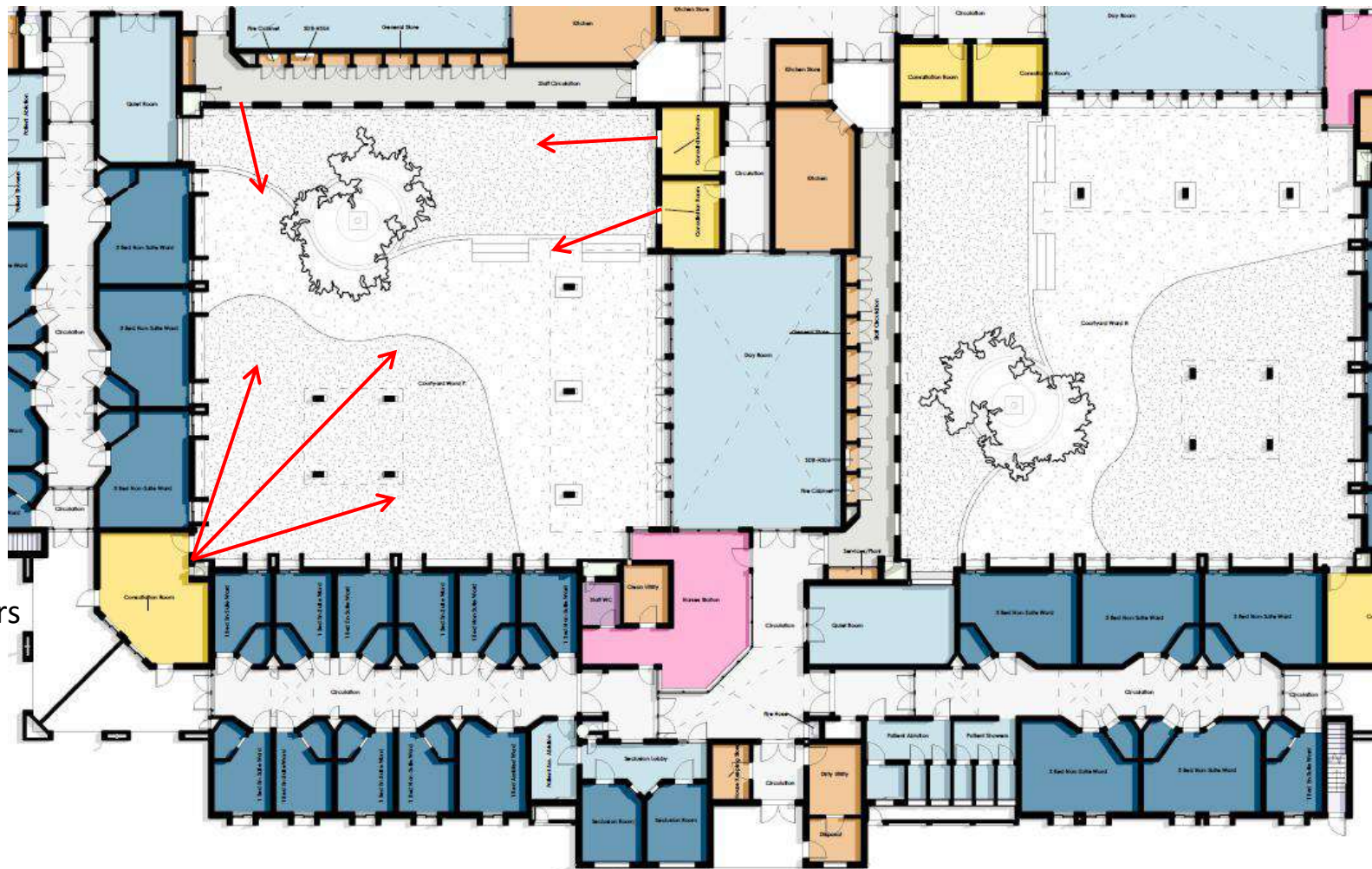


Clinical Insight

Some of the most valuable patient assessment occurs outside formal therapy sessions.

Observations occur during:

- Meals
- Recreation
- Social interaction
- Activities of daily living
- Courtyard use



Male High Secure Unit – Ward Module

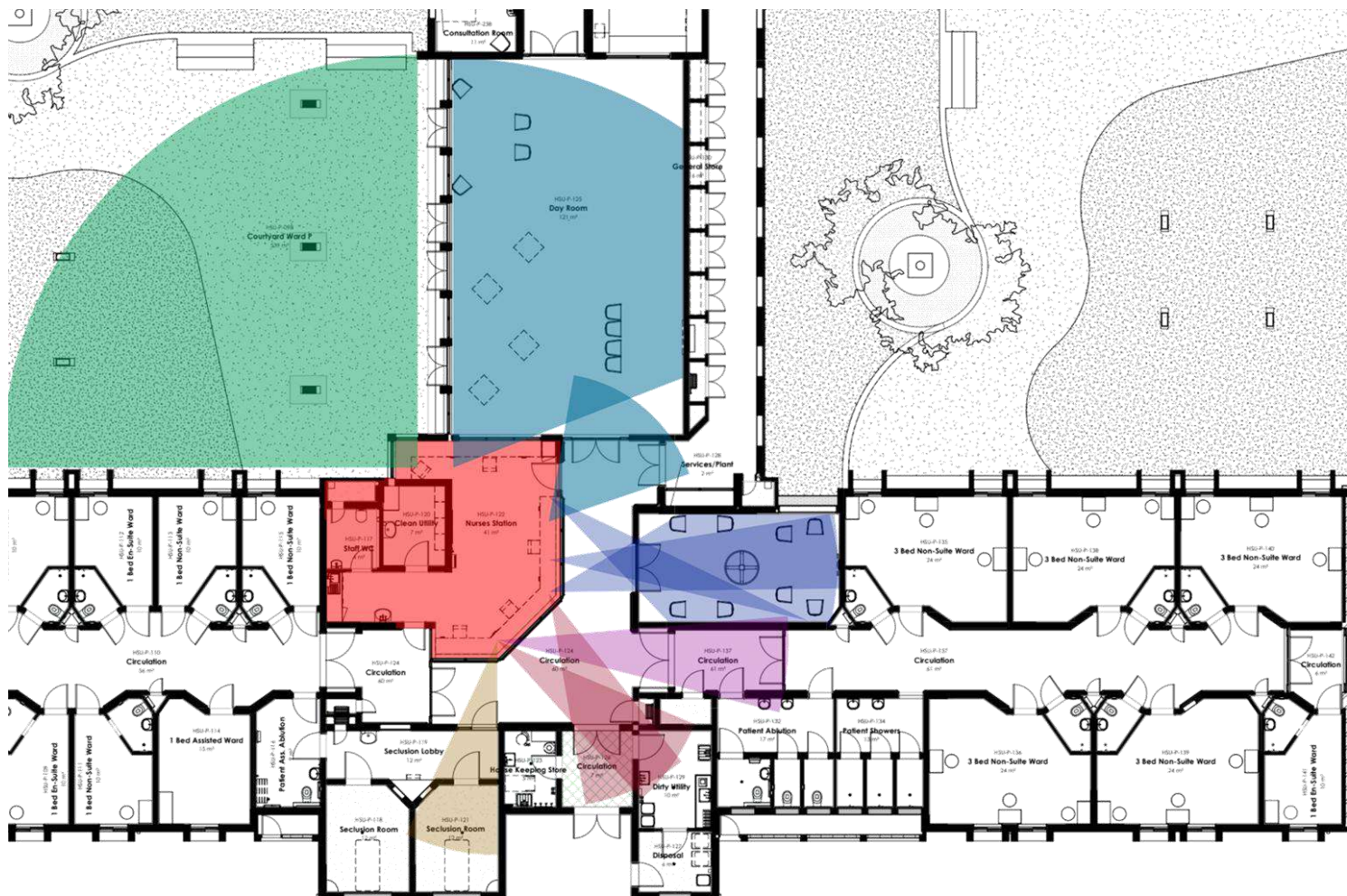
Outcome 3

Rethinking Observation

Design evolved to support clinicians requests:

- Support passive observation beyond nurse stations;
- Create clear sightlines to communal and outdoor spaces;
- Enable observation from consultation and clinical spaces;
- Balance supervision with patient dignity;
- Provide safe staff circulation and alternative egress routes.

“Clinicians changed the design team's understanding of observation.”



Male High Secure Unit – Day observation

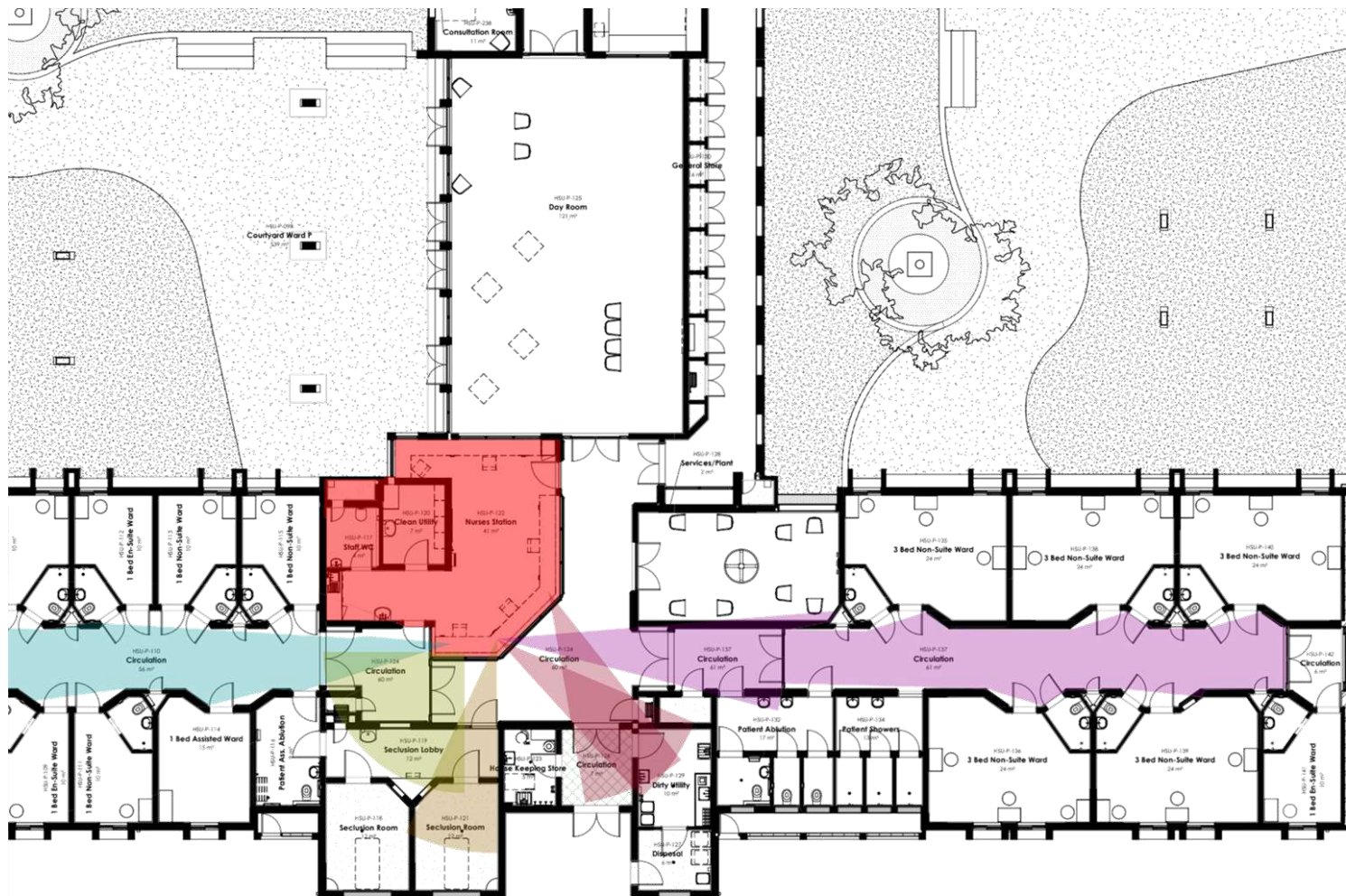
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Male High Secure Unit – Night observation

Importance

Why These Outcomes Matter

All three design outcomes emerged through collaboration between the design team and experienced users of the Valkenberg Hospital.

Not from:

- Codes
- Standards
- Design precedents

But from:

- Clinical insight
- Client Group Operational experience
- User engagement

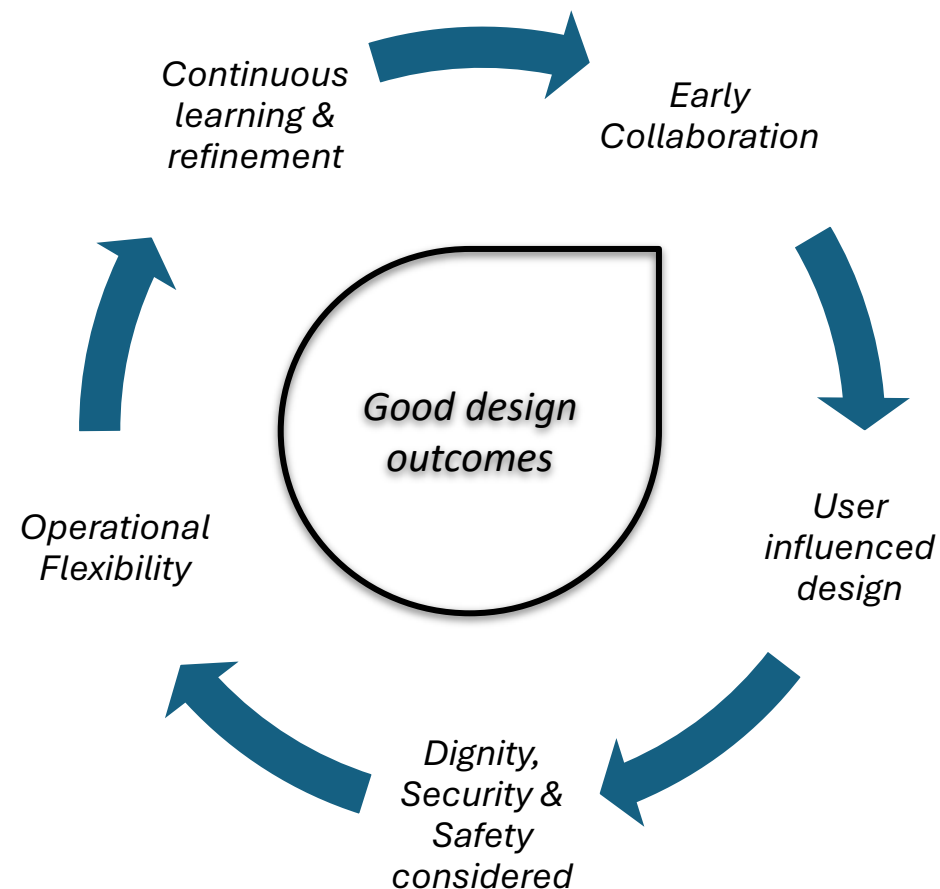


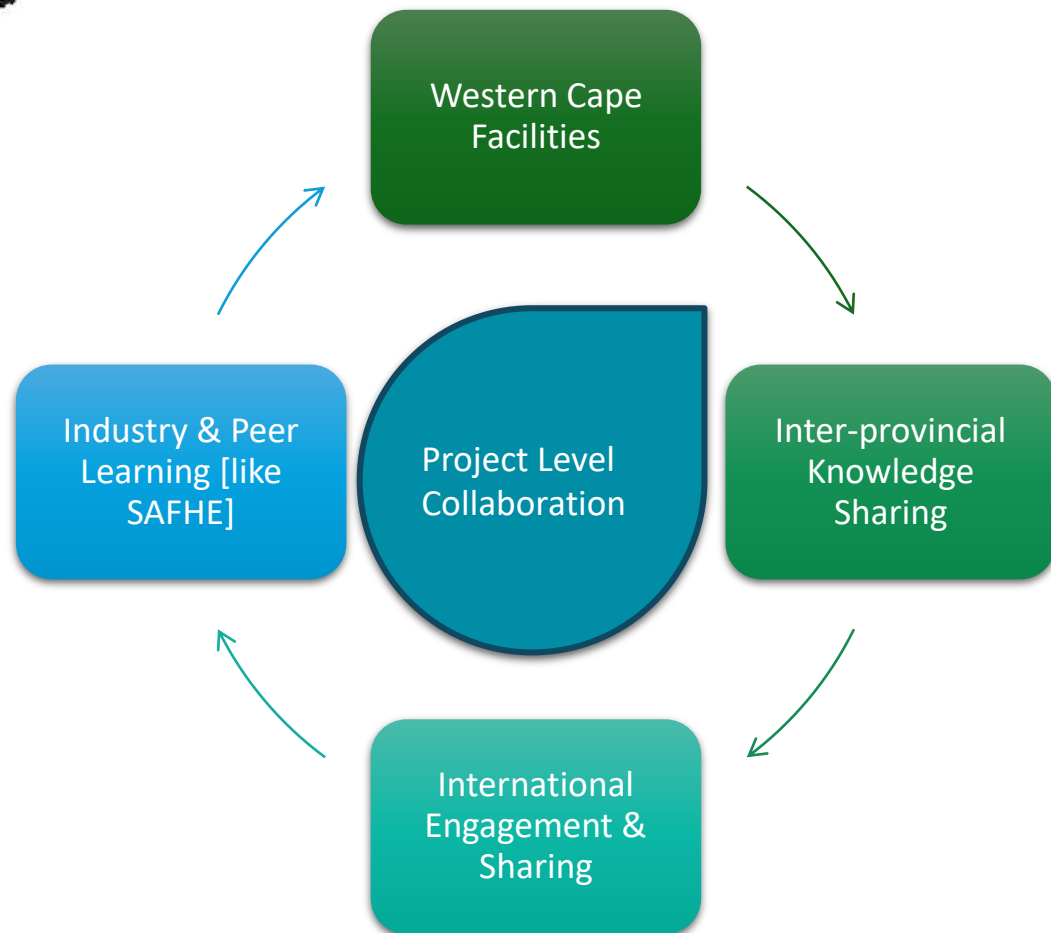
Take Away



Lessons Learned.....so far

1. Collaboration must start early.
2. Facility Users should shape the design, not simply review it.
3. Design is to facilitate, interpret, guide and lead the team to good outcomes
4. Operational flexibility can be accommodated despite strong security & safety requirements
5. Patient dignity, safety, security and operational efficiency are not mutually exclusive.
6. Continuous collaboration improves long-term resilience.





Extending The Value Of Collaboration

Beyond the project

Collaboration does not end at project completion. The lessons, approaches and design thinking developed through this process can continue to inform:

- Western Cape mental health infrastructure projects;
- Engagements with other provinces;
- International exchanges. As recently with the Ugandan healthcare stakeholders.

Equally important, these engagements bring new perspectives and lessons back into the Western Cape system

“The most enduring outcome of collaboration is the continuous exchange of knowledge that improves future healthcare projects.”



Thank You

Q & A

