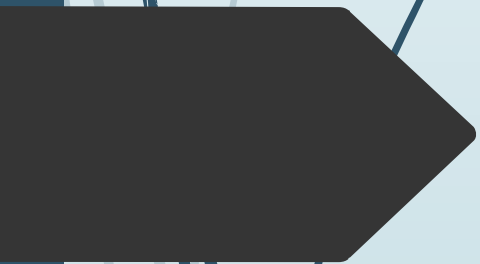


Students' Hostels &

**State Institutions Mass
Accommodation**



STUDENTS HOSTELS



- Proposed outlook of the complex

PROJECT JUSTIFICATION

- Student accommodation in the country has a severe backlog with the Target Universities being State Universities and State Institutions.
- Therefore the project will focus on hostels and accommodation.
- A useful example NUST has a total of less than 5 % of the total student population living on campus and as such its imperative that adequate accommodation is provided for.
- The bulk of the students live in rented accommodation around the campus with some living in squalid conditions which is not conducive for a learning environment.
- The current drive by the state to promote Science and Technology in the country positions NUST and CUT in very critical roles towards the realisation of this initiative.
- Students need a learning environment for research and innovation to flourish.

Prototype

- The prototype block presented in this book-let is a self contained complex that caters for 1250 students and in the case of NUST is earmarked to be replicated in four sites. The target population thereof is 5000 students.
- In the case for Chinhoyi University of Technology the prototype is earmarked to be replicated in three sites to target close to 4000 students.
- Catering facilities are provided for in the form of a canteen to ensure freedom to choose among students while also enabling viability of the catering service.

GREEN BUILDING

- **Efficient Technologies.**
- **Easier Maintenance.**
- **Return on Investment**
- **Improved indoor air quality**
- **Energy efficiency**

Key Sustainable Pillars for the Project

- **Use of interlocking blocks**
- **Solar Photovoltaic (PV), Electric Systems**
- **Photovoltaic Applications**
- **Power Factor Correction**
- **Lighting Upgrades**
- **Rain Harvesting**
- **Biogas Digesters**

Capital Expenditure Factor

- **The construction technology envisaged reduces constructions costs by at least 30% when measured against the conventional brick and mortar construction.**
- **The green building gives us the option of planting a building in the bush since it doesn't needs municipal sewer, water, electricity but just access roads.**

Economic, Social Impact of the Project (and technology)

- **Industrialisation due to the plant to be installed.**
- **Reduced cost and time for construction projects**
- **Clearing of the massive housing backlog across the country.**
- **State Institutions namely Army and Police have a huge backlog on housing requirements and stand to benefit**
- **Employment creation in thousands of direct construction artisans with downstream benefits on raw materials supply.**
- **The land reform has resulted in large numbers of the black majority going into resettlement areas, as such the requisite infrastructure such as schools, hospitals and shops needs to be put up. This interlocking block technology gives the state the option to bring up schools and police stations in record time.**
- **The low capital outturn means a shorter investment return period.**

STUDENTS HOSTELS



- Front View, of the Students Hostels Block

STUDENTS HOSTEL



- Entrance View into Block

STUDENTS HOSTEL



- The windows are recessed to reduce the solar heat gain in the rooms since there will be no air-conditioning.

STUDENTS HOSTEL

Fig : Proposed Floor Layout



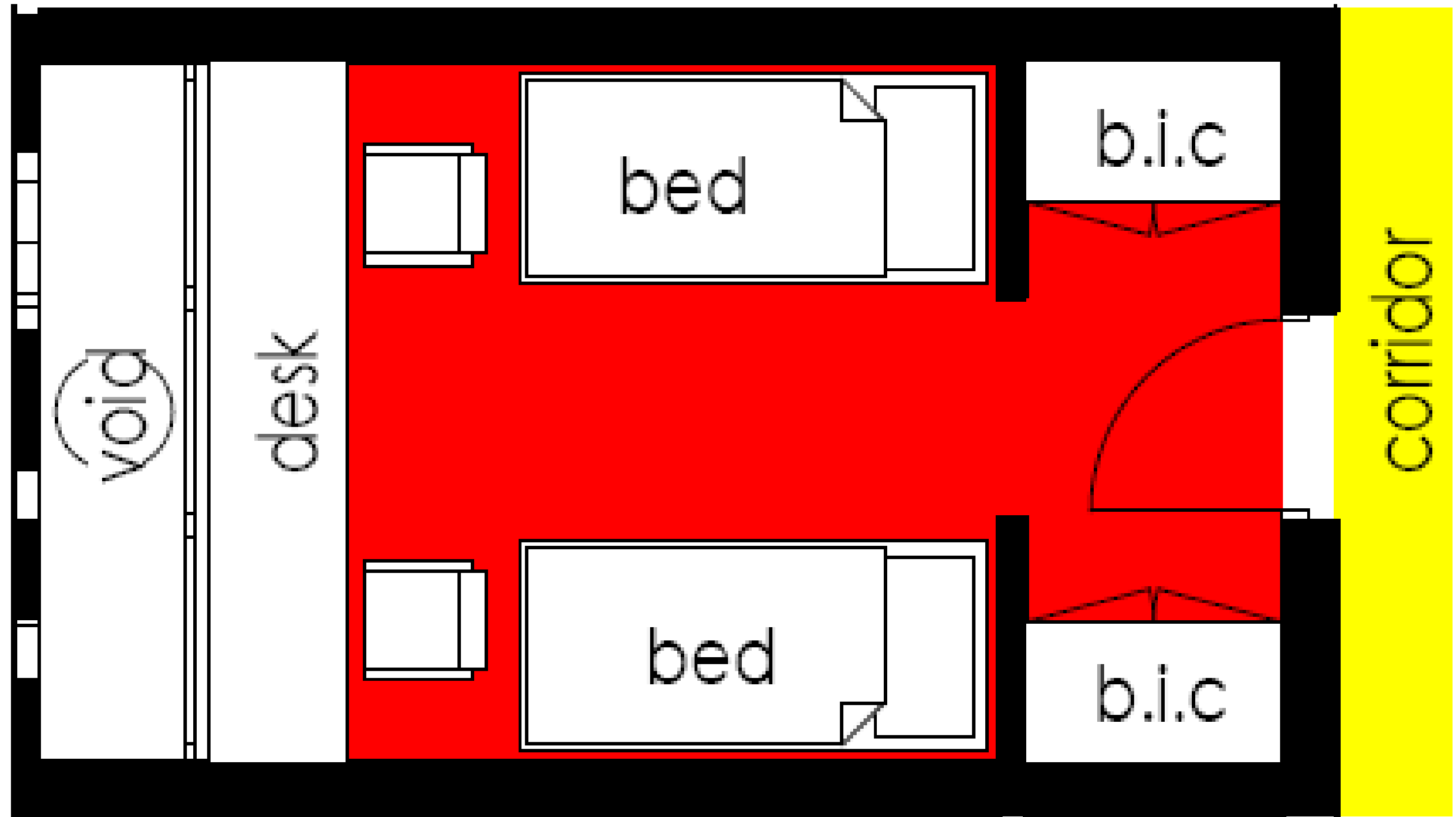
- The central courtyard maximise the social interaction among students at the same time affording studying space in the 'green open space'

STUDENTS HOSTELS

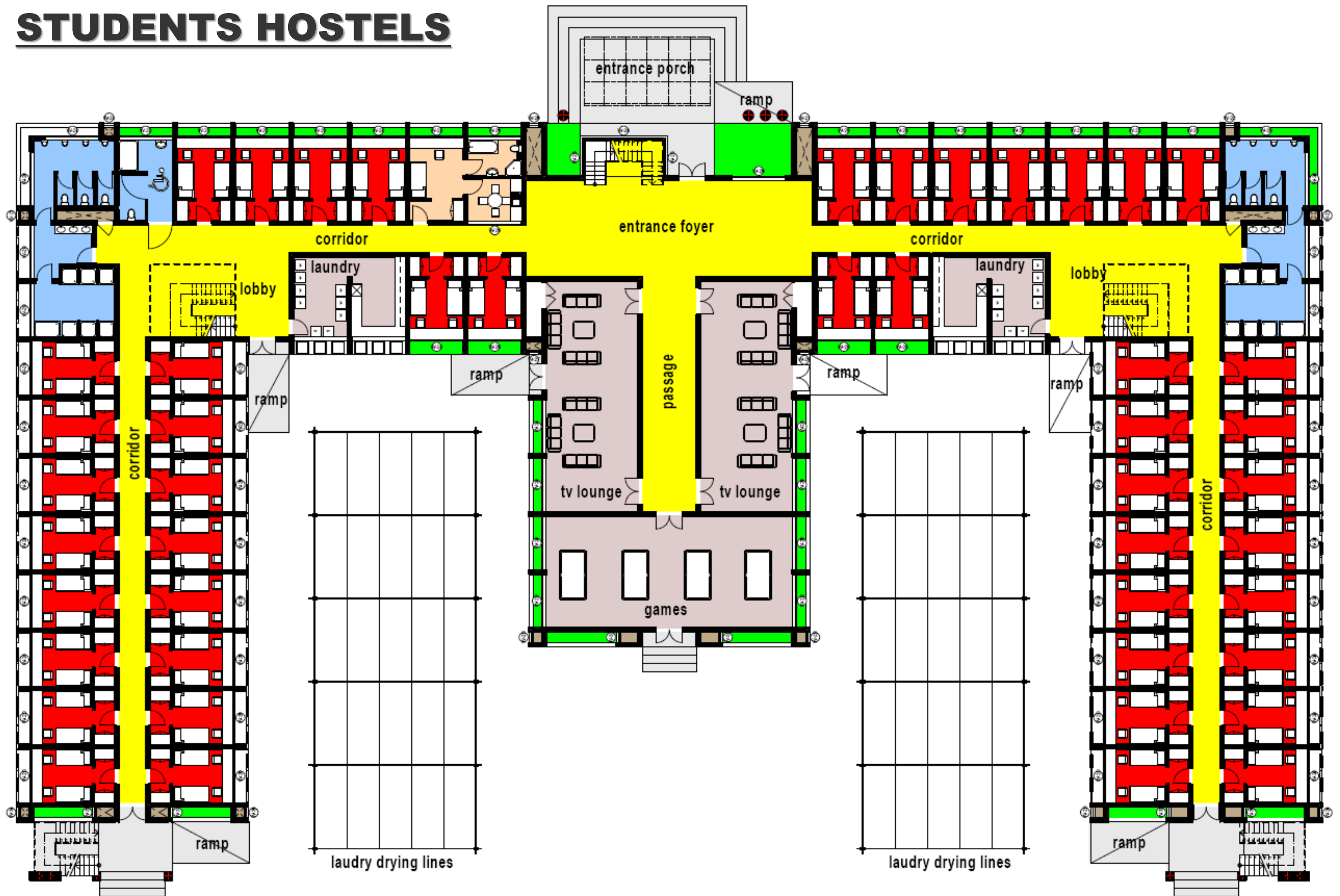


- The accommodation blocks open up to the dining hall in the background.

STUDENTS HOSTELS

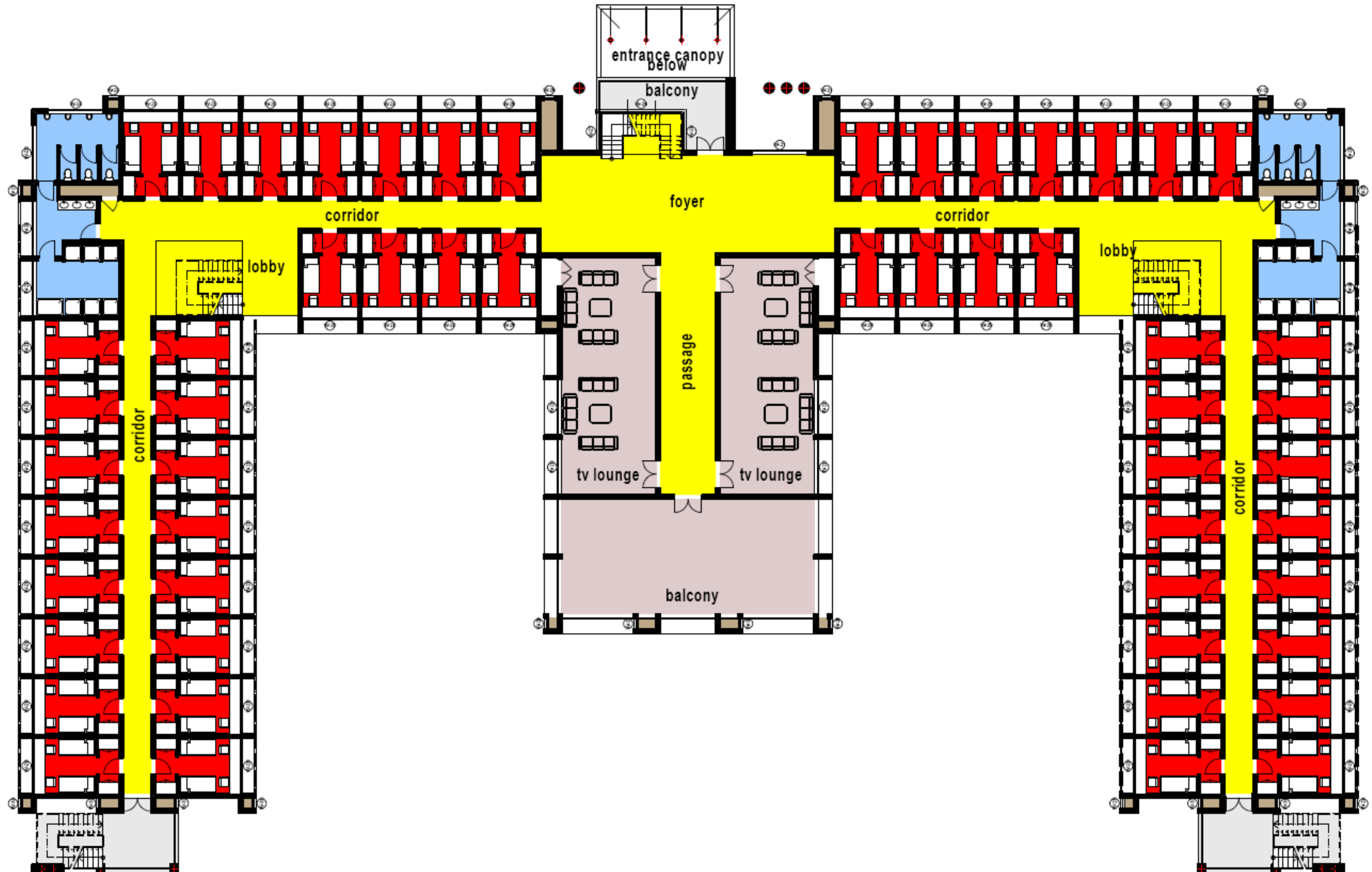


STUDENTS HOSTELS



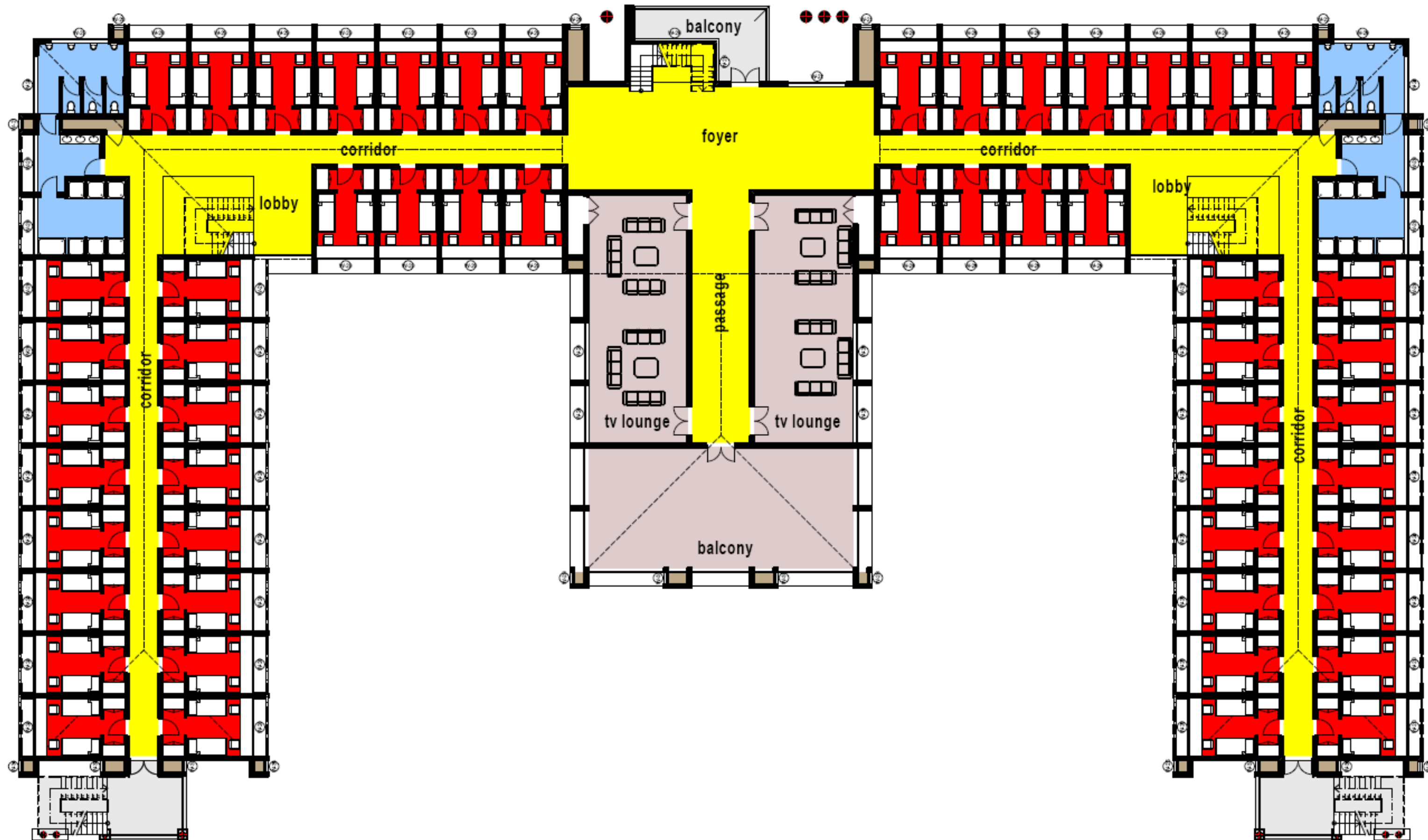
- Proposed Ground Floor Layout

STUDENTS HOSTELS



- Proposed First Floor Layout

STUDENTS HOSTELS





KEY ASSUMPTIONS ON ACCOMMODATION

- **The target population on housing are mostly junior officers due to the massive numbers involved and the low cost nature of the building.**
- **Selected houses can be done to high specifications for the senior ranks.**
- **The police also has a serious shortage of on-camp accommodation and this initiative will come in handy.**
- **Army officers with their families can be assured of a neat comfortable house which caters for the standard family size of 5.**

3 BEDROOMED HOUSE JNR STAFF

- Shared bathroom & toilet
- kitchen, dining and lounge



3 BEDROOMED HOUSE JNR STAFF

- Shared bathroom & toilet
- Open plan kitchen, dining and lounge
- 1 car garage



4 BEDROOMED HOUSE – SNR STAFF

- Main bedroom has ensuite bathroom
- Separate bathroom & toilet
- kitchen, dining and lounge



4 BEDROOMED HOUSE – SNR STAFF

- Main bedroom has ensuite bathroom
- Separate bathroom & toilet
- kitchen, dining and lounge





THE END