

REFORMATION OF JAIL, SHAHJAHANPUR

A Thesis Submitted
In Partial Fulfilment of the Requirements
For the Degree of

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In
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by
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Under the Supervision of
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to the
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**SCHOOL OF ARCHITECTURE AND PLANNING
BABU BANARASI DAS UNIVERSITY, LUCKNOW (U.P.).**

CERTIFICATE

I hereby recommend that the thesis entitled, "**REFORMATIONS OF JAIL, SHAHJHANPUR**" under the supervision, is the bonafide work of the student and can be accepted as partial fulfillment of the requirement for the degree of Bachelor's degree in architecture, School of Architecture and Planning, BBDU, Lucknow.

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Accepted

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1.0. PREFACE:

„We shape buildings, thereafter they shape us“- Winston Churchill. A **prison** has always been **conceived as a dark, dreadful and secretive facility** by the outside world. All of the **practices** that are being carried out **within the prison premises are unknown** by many. **Reformation and rehabilitation** of prisoners and the **effect of the prison environment** on their **psychology** while they are at the prison and after they are released has always been a **major concern**.

With the **numbers of crimes increasing** by the day, the count of the **criminals are increasing** too. Many of these criminals are **not first time offenders**. If a criminal or an **ex-offender gets himself into a situation where he manages to commit a crime for the second time** even **after being punished and rehabilitated**, there must seem to be **inefficiency with the methods incorporated for the reformation** of these criminals. **Punishment is not the sole aim, reformation and rehabilitation follow it too**. The latter seems to be more of a serious consideration since it has not been successful in most of the cases.

Prisons have been one of the most **neglected sectors in terms of architecture**. Most of the prisons in our country have been **functioning the way they used to since the British times**. In terms of **infrastructure** the prisons in our country need **tremendous up gradation**. **As one enters a space**, be it positive or negative, he is **psychologically affected by that space**,

This project aims at providing a conducive and humane environment to the prisoners, in order to **positively influence their thought process** and **instill within them a sense of hope and faith** towards the future to come. A **positive environment** will help **motivate them** and give them a direction towards the right path. There also is a **proposed interaction center adjacent to the prison** which will consist of **retail stores run exclusively by the ex-prisoners**. The retail stores will **sell goods manufactured within the prison premises** and will in **turn provide employment opportunities** to the ex-prisoners **breaking the ice of social stigma** towards them amongst the members of our society.

Thus, the basic objective is to **change the way one perceives a prison**, not just as a place meant for punishment but **primarily for reformation and rehabilitation producing reformed beings** who can **contribute back to the society** in some way or the other.

2.0. ACKNOWLEDGEMENTS:

First and foremost gratitude towards the almighty "**GOD**" for his blessings.

I have no words to express my gratitude for the love and affection of my parents who gave me support at every step of my life. So, this thesis is dedicated to them.

I am thankful to **Prof. Keshav Kumar** all my faculty members who have been extremely co-operative since the very beginning and who helped me to utilize my skills and creativity to the utmost.

Sincere thanks to **Ar. Urvashi and Ar. Shailesh Yadav** (Thesis Co-ordinator), who left no stone unturned to shape our thesis in the best possible way and also for his untimely help whenever required.

I express my deepest gratitude to my thesis guide **Ar. Puja Verma**, for his valuable dispassionate guidance, critical discussions, suggestions and continuous support all through my B.Arch thesis.

I would like to thank all my friends specially for their support during my thesis as well as the whole 5 year of study. Each one of them has contributed towards making me a better person and the time I spent with all of them will always be cherished.

Thanks to all my juniors specially **Kastabh Rai, Shilpi Singh** and **Sakshi Yadav** for their help in the thesis.

3.0. SYNOPSIS:

INTRODUCTION:

A prison, jail, or gaol is a facility or place in which individuals are forcibly confined and denied a variety of freedoms under the authority of the state. The prior objective behind doing this is to castigate the concerned convicted criminals. Along with punishment, rehabilitation is another major concern.

Rehabilitation does not seem to be well attained due to persistent crimes committed by the convicted persons even after being punished and rehabilitated formerly. Another concern being, there is no acceptance of these prisoners back into the society after being released, which may have extensive amounts of impact on their psychology.

Prisons are not just meant to punish the convicted, but also make them feel blameful of the offense he/she has committed by rehabilitation. The prison environment should be designed in a way so as to make the inmates repent, culpable, sinful, grounded and remorse over the sins they committed. And reform them in a way so as they do not get back to committing those mistakes once again. The prisons that are functioning at present have various psychological impacts on the convicted which may or may not end up sculpting the individual into the desired personality.

The global scenario of the prison environment has been constantly altering as the years have gone by. This transformation has been in the form of materials, colors, textures, forms, lighting, technology etc...

This project aims at reforming the purpose of a prison which currently serves only as a place for punishment. It also aims at reshaping the inmates into better individuals who in turn can help contribute and serve back to the society. This approach is an experiment which also focuses on breaking the sense of social stigma prevailing amongst the members of our society towards the prisoners after they have been released back into the society.

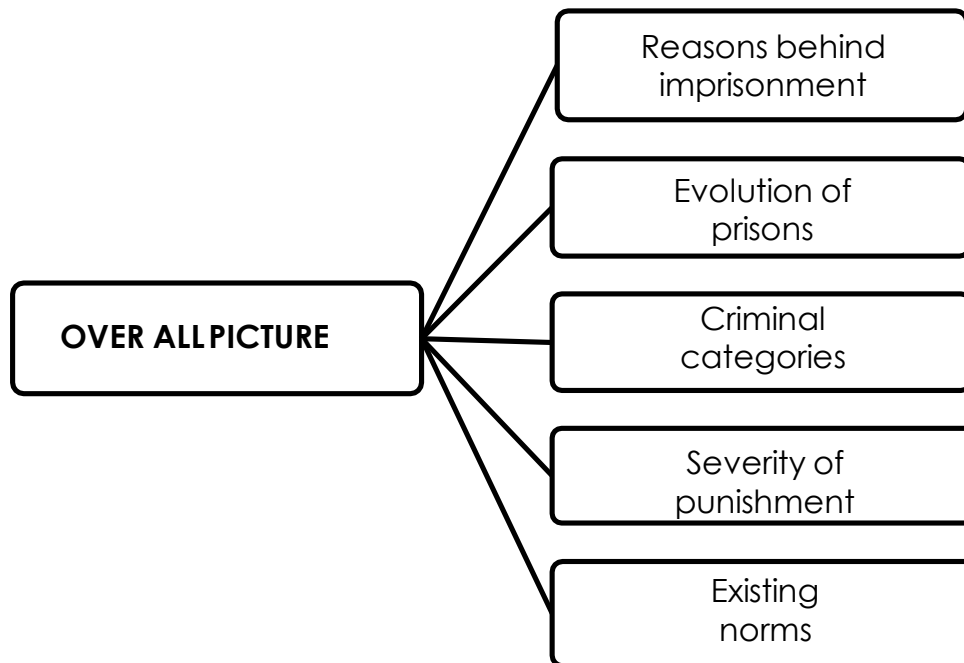
AIM:

- To design a central jail for the prisoners which is an experimental concept that will focus on the overall rehabilitation and reformation of the inmates.

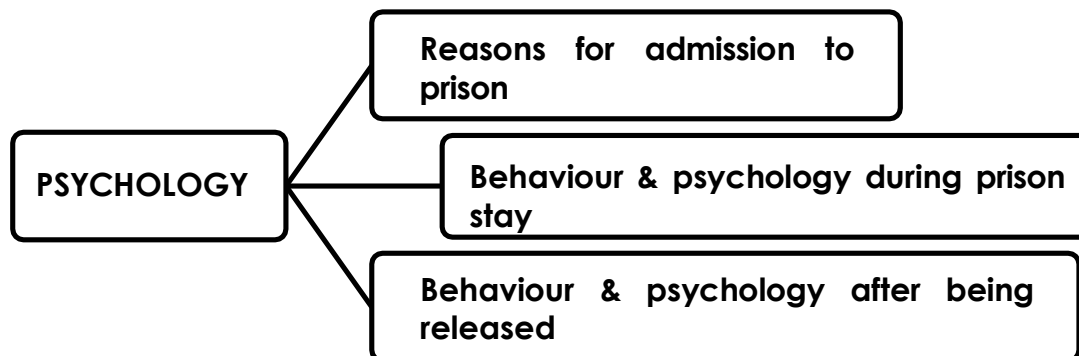
- To design an interaction center which will give the ex-prisoners employment opportunities as well as give them a platform to interact with the members of our society thereby breaking the social stigma prevailing amongst the minds of the people

OBJECTIVE:

To understand the overall picture of a prison and its functionality:



To understand the psychology of prisoners:



- The main objective behind this project is to change the definition of a prison and change the way people perceive ex-prisoners.
- To emphasize more on rehabilitation and most importantly reformation of the prisoners.
- To break the barrier of social stigma which prevents acceptance of the ex-prisoners back into the society forcing them to getting back into crime.
- To provide a platform where the ex-prisoners can prove that they have been reformed and are ready to be accepted back into the society.

NEED :

- Prisons in our country are a segment which have been completely ignored in terms of architecture.

Prisons in our country are still functioning the way they used to during the rule of the British.

- Currently, the prisons have lack of infrastructure, health, hygiene etc... The inhabitable conditions play a vital role in disturbing the psychology of the inmates. The fact that the prisoner has been imprisoned and has been deprived of his freedom, is his punishment, subjecting him to worse within the premises is punishment on punishment.
- Architectural spaces have the power of influencing ones psyche as one walks into them. Currently prisons are more about fitting in people rather than accommodating them.
- Prisoners are looked out for only until their sentence in the jail, whereas the most sensitive period begins after being released from the prison. The current prison system concentrates more on punishment than on reformation and rehabilitation.
- There are 68% of under trials out of the total prison population. This means that many of them are innocent and do not deserve to be subjected to a harsh environment.

SCOPE:

To provide an annexe to the existing Yerwada prison considering it is facing problems related to overcrowding. Provision of a habitable and humane environment which is conducive for the rehabilitation and reformation of the inmates This project includes the following spaces:

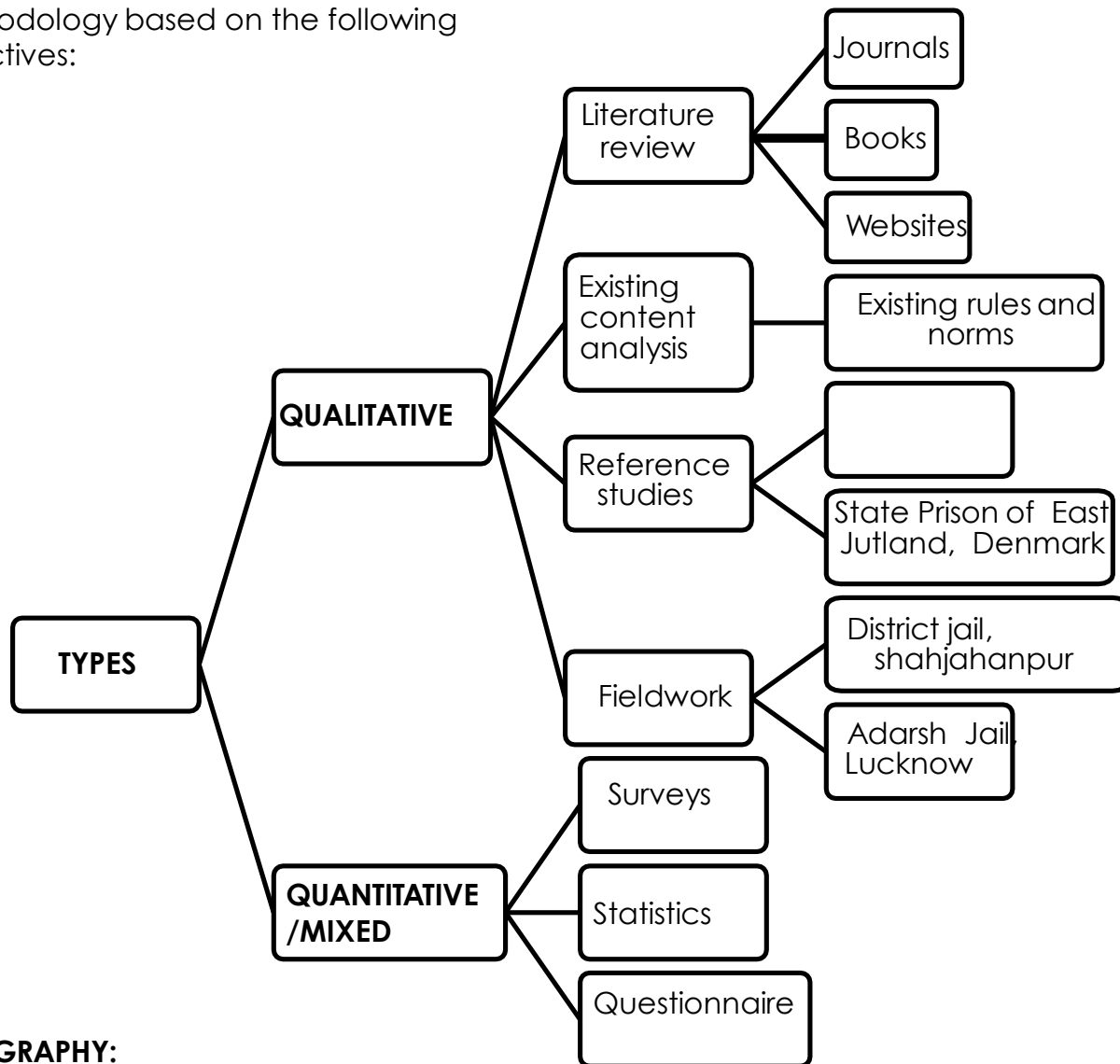
- Administration facilities limited to the requirements of the annexe
- Typologies of accommodation to tackle the problem of overcrowding
- Dining and kitchen facilities
- Infirmary or health centre
- Education zone- Classrooms where various subjects will be taught
- Sacred zone- Spaces like prayer halls, meditation cells, library
- Recreational zone- Indoor games, informal amphitheatre, sports ground etc...
- Interaction centre- A set of retail stores selling goods manufactured within the prison premises run exclusively by the ex- prisoners

LIMITATION:

This design concentrates only on the problems faced by Yerwada jail for men. The Yerwada jail for women, which is located opposite the Yerwada jail for men has not been included as a part of this design.

METHODOLOGY:

Methodology based on the following objectives:



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INTRODUCTION

"He who opens a school door, closes a
prison."

-Victor Hugo



“Jail is a place of confinement for persons held in lawful custody”

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Prisons are not just meant to punish the convicted, but also make them feel blameful of the offense he/she has committed by rehabilitation. The prison environment should be designed in a way so as to make the inmates repent, culpable, sinful, grounded and remorse over the sins they committed. And reform them in a way so as they do not get back to committing those mistakes once again. The prisons that are functioning at present have various psychological impacts on the convicted which may or may not end up sculpting the individual into the desired personality.

The global scenario of the prison environment has been constantly altering as the years have gone by. This transformation has been in the form of materials, colors, textures, forms, lighting, technology etc...

This project aims at reforming the purpose of a prison which currently serves only as a place for punishment. It also aims at reshaping the inmates into better individuals who in turn can help contribute and serve back to the society. This approach is an experiment which also focuses on breaking the sense of social stigma prevailing amongst the members of our society towards the prisoners after they have been released back into the society.

4.3. INDIAN PRISON SYSTEM:

Prison establishments in India comprise of 8 categories of jails. The most common and standard jail institutions are Central Jails, District Jails and Sub Jails. The other types of jail establishments are Women Jails, Borstal Schools, Open Jails and Special Jails.

Type	Number	Total Capacity
Central Jails	123	1,37,249
District Jails	333	1,24,768
Sub Jails	809	50,908
Women Jails	19	4,271
Open Jails	44	3,766
Borstal Schools	21	2,218
Special Jails	30	9,279
Other Jails	3	323
Total	1382	3,32,782

CENTRAL JAIL:

The criteria for a jail to be categorized as a Central Jail varies from state to state. However, the common feature observed throughout India is that prisoners sentenced to imprisonment for a long period (more than 2 years) are confined in the Central Jails, which have larger capacity in comparison to other jails. These jails also have rehabilitation facilities.

Maharashtra and Tamil Nadu have the highest number of 9 Central Jails each followed by Karnataka, Bihar, Madhya Pradesh, Rajasthan and Delhi with 8 each. Arunachal Pradesh, Meghalaya, Andaman & Nicobar Islands, Dadra & Nagar Haveli, Daman & Diu and Lakshadweep do not have any Central Jails.

DISTRICT JAIL:

District jails serve as the main prisons in States/UTs where there are no Central Jails. States which have considerable number of District Jails are Uttar Pradesh (53), Bihar (30), Maharashtra and Rajasthan (25 each), Madhya Pradesh (22), Assam (21), Jharkhand (17), Haryana (16) and Karnataka (15).

SUB JAIL:

Sub jails are smaller institutions situated at a sub-divisional level in the States. Ten states have reported comparatively higher number of sub-jails revealing a well organized prison set-up even at lower formation.

These states are Maharashtra (172), Andhra Pradesh (96), Tamil Nadu (94), Madhya Pradesh (92), Karnataka (74), Odisha (66), Rajasthan (60), West Bengal (31), Kerala (29) and Bihar (16). Odisha had the highest capacity of inmates in various Sub-Jails. 8 States/UTs have no sub-jails namely Arunachal Pradesh, Haryana, Manipur, Meghalaya, Mizoram, Sikkim, Chandigarh and Delhi.

WOMEN JAIL:

Women jails are exclusively used for women prisoners, although women may also be imprisoned in other jails. They exist only in 12 States/UTs.

Tamil Nadu and Kerala have 3 women jails each and Andhra Pradesh, Rajasthan & West Bengal have 2 women jails each. Bihar, Maharashtra, Odisha, Punjab, Tripura, Uttar Pradesh and Delhi have one women jail each. The total capacity of women inmates was highest in Tamil Nadu.

BORSTAL SCHOOL:

Borstal Schools are a type of youth detention center and are used exclusively for the imprisonment of minors or juveniles. The primary objective of Borstal Schools is to ensure care, welfare and rehabilitation of young offenders in an environment suitable for children and keep them away from

contaminating atmosphere of the prison. The juveniles in conflict with law detained in Borstal Schools are provided various vocational training and education with the help of trained teachers..

Haryana and Himachal Pradesh are the only states that have the capacity to lodge female inmates in 3 of their Borstal Schools. There are no borstal schools in any of the UTs.

OPEN JAIL:

Open jails are minimum security prisons. Prisoners with good behavior satisfying certain norms prescribed in the prison rules are admitted in open prisons.

Prisoners are engaged in agricultural activities. Fourteen states have functioning Open Jails in their jurisdiction. Rajasthan reported the highest number of 23 open jails.

SPECIAL JAIL:

Special jails are high security facilities that have specialized arrangements for keeping offenders and prisoners who are convicted of terrorism, insurgency and violent crimes. Special jail means any prison provided for the confinement of a particular class or particular classes of prisoners which are broadly as follows:

- Prisoners who have committed serious violations of prison discipline.
- Prisoners showing tendencies towards violence and aggression.
- Difficult discipline cases of habitual offenders.
- Difficult discipline cases from a group of professional/organised criminals.

Kerala has the highest number of special jails - 9. Provision for keeping female prisoners in these special jails is available in Tamil Nadu, West Bengal, Gujarat, Kerala, Assam, Karnataka and Maharashtra.

OTHER JAILS:

Jails that do not fall into the categories discussed above, fall under the category of Other Jails. Three states - Goa, Karnataka & Maharashtra - have 1 other jail each in their jurisdiction. No other state/UT has an other jail. The capacity of inmates (male & female) reported by these three States in such jails was highest in Karnataka (250) followed by Goa (45) and Maharashtra (28).

NAME OF THE JAIL	YEAR OF COMMENCEMENT
PRE- INDEPENDENCE	
Vellore Central Prison	1830
Madras Central Prison	1837
District Prison, Mangalore	1850
District Sub-Jai, Dharwad	1858
Central Prison, Mysore	1862
Rajahmundry Central Prison	1864
Tiruchirappalli Central Prison	1865
Madurai Central Prison	1865
Central Prison, Kannur	1869
Yerwada Central Jail	1871
Coimbatore Central Prison	1872
Chanchalguda Central Jail	1879
Palayamkottai Central Prison	1880
Central Prison, Bellary	1884
Central Prison, Bijapur	1888
Cellular Jail	1906
Alipore Jail	1910
Central Prison, Viyyur	1914
Central Prison, Poojappura	1914
Arthur Road Jail	1926
POST INDEPENDENCE	
Tihar Jail	1957
Cuddalore Central Prison	1986
Puzhal Central Prison	2006

4.4. PRINCIPLES FOR THE TREATMENT OF THE PRISONERS (INDIAN PRISON MANUAL)

**ADOPTED AND PROCLAIMED BY GENERAL ASSEMBLY RESOLUTION 45/111 OF
14 DECEMBER 1990 CITATION)**

1. All prisoners shall be treated with respect, dignity and value as human beings. No discrimination on the grounds of race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.
2. It is, however, desirable to respect the religious beliefs and cultural precepts of the group to which prisoners belong, whenever local conditions so require.
3. The responsibility of prisons for the custody of prisoners and for the protection of society against crime shall be discharged in keeping with a State's other social objectives and its fundamental responsibilities for promoting the well-being.
4. Except for those limitations that are demonstrably necessitated by the fact of incarceration, all prisoners shall retain the human rights and fundamental freedoms set out in the Universal Declaration of Human Rights, and, where the State concerned is a party, the International Covenant on Economic, Social and Cultural Rights, and the International Covenant on Civil and Political Rights and the Optional Protocol thereto, as well as such other rights as are set out in other United Nations covenants.
5. All prisoners shall have the right to take part in cultural activities and education aimed at the full development of the human personality.
6. Efforts addressed to the abolition of solitary confinement as a punishment, or to the restriction of its use, should be undertaken and encouraged.
7. Conditions shall be created enabling prisoners to undertake meaningful remunerated employment which will facilitate their reintegration into the country's labor market and permit them to contribute to their own financial support and to that of their families.
8. Prisoners shall have access to the health services available in the country. With the participation and help of the community and social institutions, and with due regard to the interests of victims, favorable conditions shall be created for the reintegration of the ex-prisoner into society.

STANDARD MINIMUM RULES FOR THE TREATMENT OF PRISONERS (INDIAN PRISON MANUAL)

BASIC PRINCIPLE:

Rules shall be applied impartially. No discrimination on grounds of race, colour, sex, language, religion, national or social origin, property, birth or other status. Respect the religious beliefs and moral precepts of the group to which a prisoner belongs.

SEPARATION OF CATEGORIES:

Different categories of prisoners shall be kept in separate institutions.

(a) Men and women shall be detained in separate institutions; in an institution which receives both men and women the whole of the premises allocated to women shall be entirely separate.

(b) Untried prisoners shall be kept separate from convicted prisoners.

(c) Persons imprisoned for debt and other civil prisoners shall be kept separate from persons imprisoned by reason of a criminal offence.

(d) Young prisoners shall be kept separate from adults.

ACCOMMODATION:

Where sleeping accommodation is in individual cells or rooms, each prisoner shall occupy by night a cell or room by himself. If for special reasons, such as temporary overcrowding, it becomes necessary for the central prison administration to make an exception to this rule, it is not desirable to have two prisoners in a cell or room.

Where dormitories are used, they shall be occupied by prisoners carefully selected as being suitable to associate with one another in those conditions. Regular supervision by night, in keeping with the nature of the institution.

All accommodation provided for the use of prisoners and in particular all sleeping accommodation shall meet all requirements of health, due regard being paid to climatic conditions and particularly to cubic content of air, minimum floor space, lighting, heating and ventilation.

In all places where prisoners are required to live or work,

The windows shall be large enough to enable the prisoners to read or work by natural light, and shall be so constructed that they can allow the entrance of fresh air whether or not there is artificial.

Artificial light shall be provided sufficient for the prisoners to read or work without injury to eyesight.

The sanitary installations shall be adequate to enable every prisoner to comply with the needs of nature when necessary and in a clean and decent manner.

Adequate bathing and shower installations shall be provided so that every prisoner may be enabled and required to have a bath or shower, at a temperature suitable to the climate, as frequently as necessary for general hygiene according to season and geographical region, but at least once a week in a temperate climate.

EXERCISE AND SPORT:

Every prisoner who is not employed in outdoor work shall have at least one hour of suitable exercise in the open air daily if the weather permits. Young prisoners, and others of suitable age and physique, shall receive physical and recreational training during the period of exercise. To this end space, installations and equipment should be provided.

CONTACT WITH THE OUTSIDE WORLD:

Prisoners shall be allowed under necessary supervision to communicate with their family and reputable friends at regular intervals, both by correspondence and by receiving visits. Prisoners who are foreign nationals shall be allowed reasonable facilities to communicate with the diplomatic and consular representatives of the State to which they belong. Prisoners shall be kept informed regularly of the more important items of news by the reading of newspapers, periodicals or special institutional publications, by hearing wireless transmissions, by lectures or by any similar means as authorized or controlled by the administration.

BOOKS:

Every institution shall have a library for the use of all categories of prisoners, adequately stocked with both recreational and instructional books, and prisoners shall be encouraged to make full use of it.

TREATMENT:

The treatment of persons sentenced to imprisonment or a similar measure shall have as its purpose, so far as the length of the sentence permits, to establish in them the will to lead law-abiding and self-supporting lives after their release and to fit them to do so. The treatment shall be such as will encourage their self-respect and develop their sense of responsibility. To these ends, all appropriate means shall be used, including religious care in the countries where this is possible, education, vocational guidance and training, social casework, employment counselling, physical development and strengthening of moral character..

This is done in accordance with the individual needs of each prisoner, taking account of his social and criminal history, his physical and mental capacities and aptitudes, his personal temperament, the length of his sentence and his prospects after release.

WORK:

Prison labour must not be of an afflictive nature. All prisoners under sentence shall be required to work, subject to their physical and mental fitness as determined by the medical officer. Sufficient work of a useful nature shall be provided to keep prisoners actively employed for a normal working day.

Within the limits compatible with proper vocational selection and with the requirements of institutional administration and discipline, the prisoners shall be able to choose the type of work they wish to perform. There shall be a system of equitable remuneration of the work of prisoners.

Under the system prisoners shall be allowed to spend at least a part of their earnings on approved articles for their own use and to send a part of their earnings to their family. The system should also provide that a part of the earnings should be set aside by the administration so as to constitute a savings fund to be handed over to the prisoner on his release.

EDUCATION AND RECREATION:

Provision shall be made for the further education of all prisoners capable of profiting thereby, including

religious instruction in the countries where this is possible.

The education of illiterates and young prisoners shall be compulsory and special attention shall be paid to it by the administration. So far as practicable, the education of prisoners shall be integrated with the educational system of the country so that after their release they may continue their education without difficulty. Recreational and cultural activities shall be provided in all institutions for the benefit of the mental and physical health of prisoners.

SOCIAL RELATIONS AND AFTER-CARE:

Special attention shall be paid to the maintenance and improvement of such relations between a prisoner and his family as are desirable in the best interests of both.

From the beginning of a prisoner's sentence consideration shall be given to his future after release and he shall be encouraged and assisted to maintain or establish such relations with persons or agencies outside the institution as may promote the best interests of his family and his own social rehabilitation.

Background study

"People always think about what a prison is.
What prison really is - it's not a physical challenge,
it's mental."
- Hill Harper

5.1. HISTORY OF PRISONS:

The origins of prisons can be traced back to the rise of the state as a form of social organization. Corresponding with the advent of the state was the development of written language, which enabled the creation of formalized legal codes as official guidelines for society like the Code of Hammurabi, written in Babylon around 1750 BC.

The penalties for violations of the laws in Hammurabi's Code were centred around the concept of "lex talionis" ("the law of retaliation") where people were punished as a form of vengeance, often by the victims themselves. This notion of punishment as vengeance or retaliation can also be found in many other legal codes from early civilizations, including the ancient Sumerian codes, the Indian Manama Dharma Astra, the Hermes Trismegitus of Egypt, and the Mosaic Code.

A common punishment in Early Modern Europe was becoming a galley slave. Some Ancient Greek philosophers, such as Plato, began to develop ideas of using punishment to reform offenders instead of simply using it as retribution.

Imprisonment as a penalty was initially for those who could not afford to pay their fines. Since impoverished Athenians could not pay their fines, leading to indefinite periods of imprisonment, time limits were set. The actual location of the prison cells is not known.

PRE MODERN ERA:

The Romans were among the first to use prisons as a form of punishment, rather than simply for detention. A variety of existing structures were used to house prisoners, such as metal cages, basements of public buildings, and quarries.

One of the most notable Roman prisons was the Mamertine Prison, established around 640 B.C. by Ancus Marcius. It was located within a sewer system beneath ancient Rome, and contained a large network of dungeons where prisoners were held in squalid conditions, contaminated with human waste. During the Middle Ages in Europe, castles, fortresses, and the basements of public buildings were often used as makeshift prisons.

Another common punishment was sentencing people to galley slavery where they were chained together in the bottoms of ships and forced to row on naval or merchant vessels. Punishment usually consisted of physical forms of punishment, including capital punishment, mutilation and whipping, and non-physical punishments, such as public shaming rituals like the stock.

1750 BC.	Code Of Hammurabi written in Babylon
650 BC.	Establishment of Mamertine Prison in Rome
19 th Century onwards	Emergence of Concept of Modern Prison



The Mamertine Prison in Rome, with an altar commemorating the legendary tradition that Saints Peter and Paul were imprisoned there.

PENAL COLONIES:

During the 18th century, popular resistance to public execution and torture became more widespread, and rulers began looking for means to punish and control their subjects in a way that did not cause people to associate them with spectacles of tyrannical and sadistic violence.

1610-1770	America
1700	Russia
1788-1868	Australia
1800	England
1800-1951	France

Penal transportation of convicted criminals to penal colonies



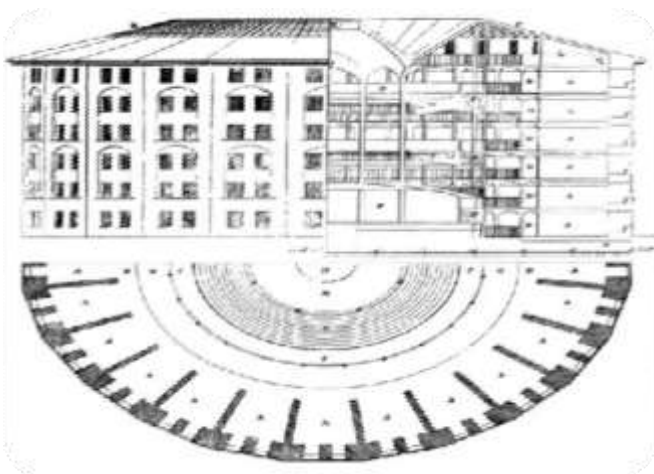
The beached convict ship at Deptford, serving as a convict hulk from 1818 until 1834.

PRISON REFORM:

John Howard was the first notable prison reformer. He was particularly appalled to discover prisoners who had been acquitted but were still confined because they couldn't pay the jailer's fees. He proposed wide ranging reforms to the system, including that each prisoner should be in a separate cell, that staff should be professional and paid by the government, that outside inspection of prisons should be imposed, and that prisoners should be provided with a healthy diet and reasonable living conditions.

The Penitentiary Act introduced solitary confinement, religious instruction and a labour regime and proposed two state penitentiaries, one for men and one for women. Elizabeth Fry documented the conditions that prevailed at Newgate prison, where the ladies' section was overcrowded with women and children, some of whom had not even received a trial.

1777	John Howard published the State Of Prisons
1779	Penitentiary Act was passed
1815	Jail fees were abolished
1816	Elizabeth Fry founded prison school for children
1817	Elizabeth Fry helped found the Association for the Reformation of the female prisoners in Newgate



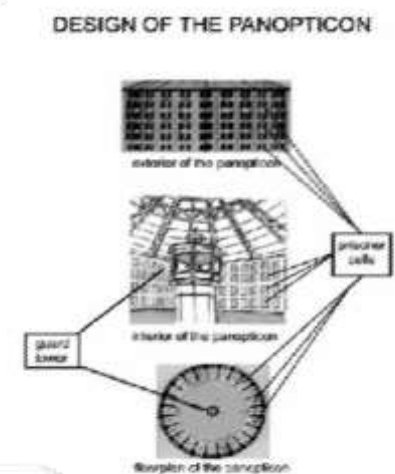
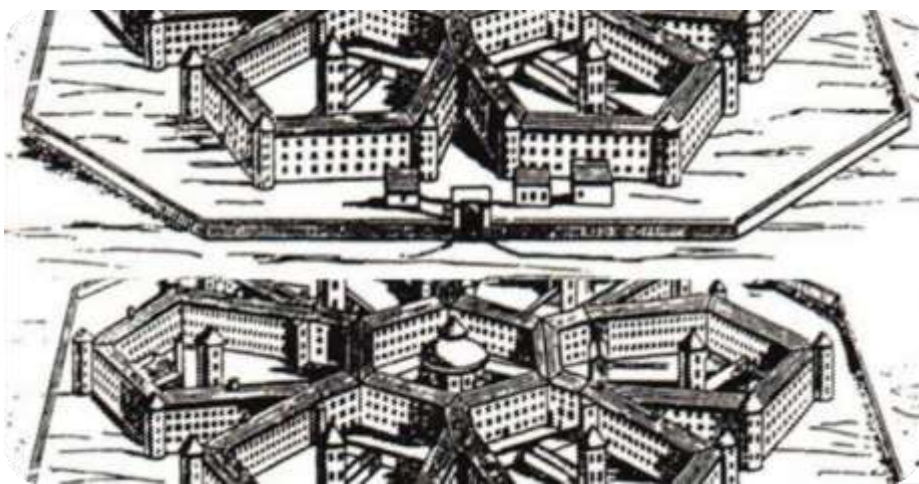
The modern prison is designed to maximize control of the prisoners, and to keep them under constant surveillance. This is an architectural drawing of Jeremy Bentham's Panopticon penitentiary.

MASS INCARCERATION:

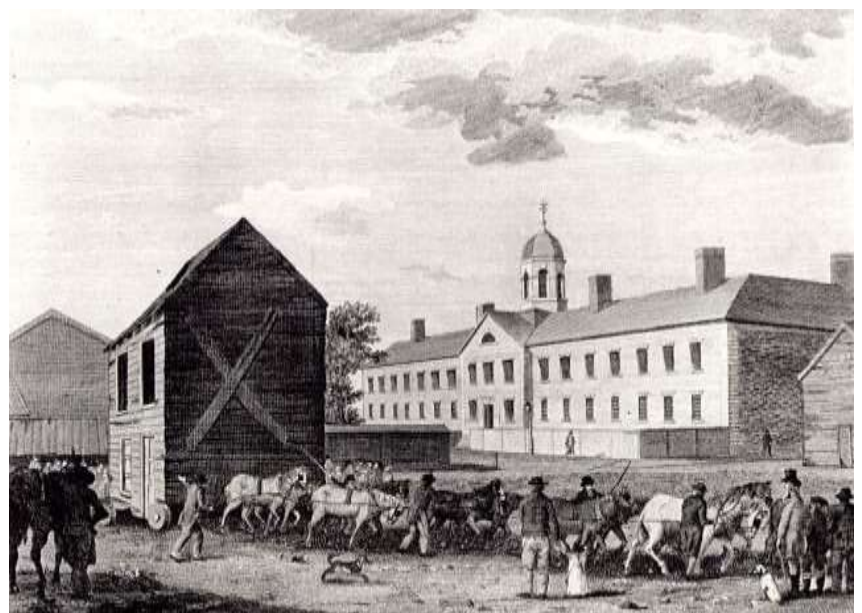
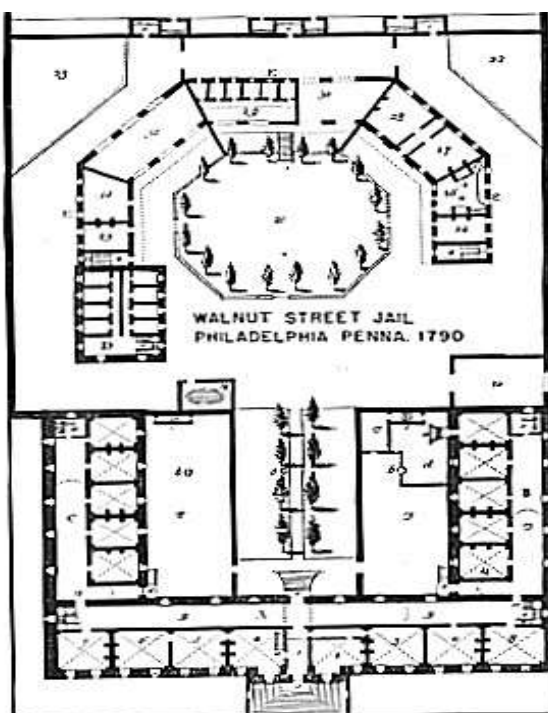
The theory of the modern prison system was born in London, influenced by the utilitarianism of Jeremy Bentham. Bentham's panopticon introduced the principle of observation and control that underpins the design of the modern prison.

The notion of prisoners being incarcerated as part of their punishment and not simply as a holding state until trial or hanging, was at the time revolutionary.

1816	The Society for the Improvement of Prison Discipline was founded
1820	Declination of Faith in the efficacy of legal reform
1823	Robert Peel's Gaols Act
1824	54 prisons had adopted the disciplinary system advocated by the SIPD
1840	Penal transportation to Australia and the use of hulks was on the decline
1842	Pentonville prison opened
1861	The government of Italy reformed the repressive and arbitrary prison system they inherited, and modernized and secularized criminal punishment by emphasizing discipline and deterrence



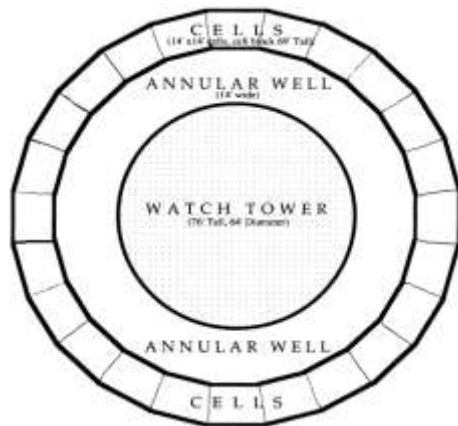
The first prisons in the United States were modelled on Jeremy Bentham's "panopticon" model, with wings of one-person cells radiating outward from a central control/surveillance structure..



Pennsylvania was the first to turn its old jail at Walnut Street into a state prison

5.2. EVOLUTION OF PRISONS:

1. THE PANOPTICON (LATE 18TH CENTURY), CONCEPTUALIZED BY JEREMY BANTHAM

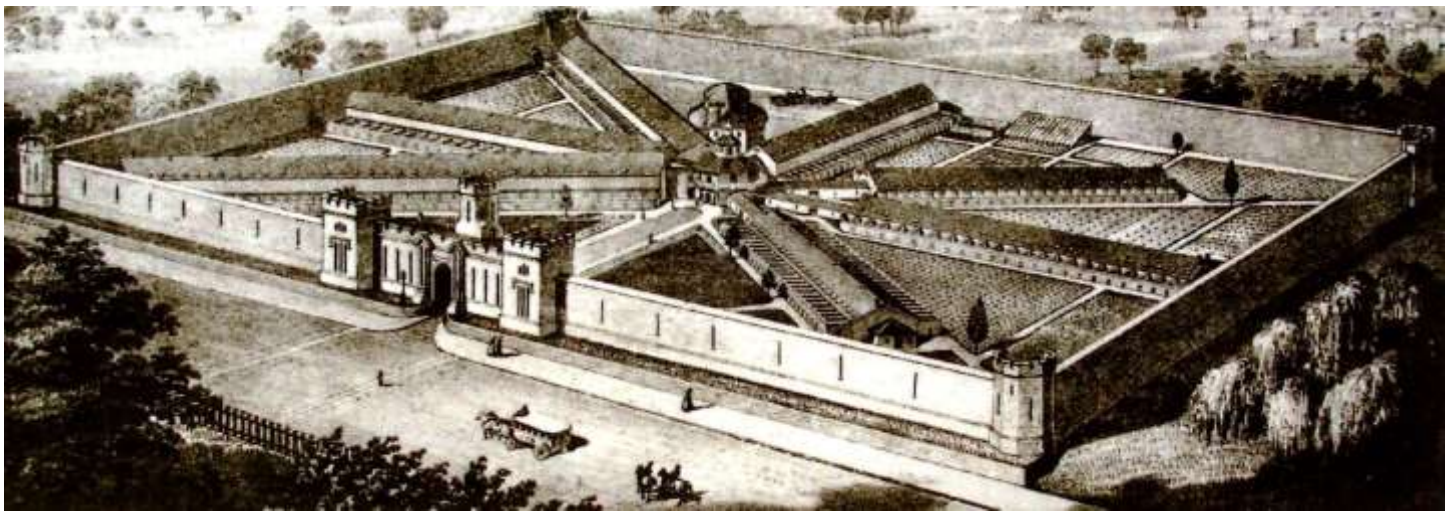


1.1 Plan of The Panopticon



1.2 Interior view of the Panopticon showing the centrally located monitoring space

2. THE EASTERN STATE PENITENTIARY(1829), PHILADELPHIA, DESIGNED BY JOHN HAVILAND



2.1 Birds eye view of the Eastern State Penitentiary



2.2 Interiors of the Eastern State Penitentiary showcasing the corridors, cell block and toilet respectively.

3. PRISON MODELO, BASED ON THE PANOPTICON (1928) , CUBA BUILT UNDER PRESIDENT-TURNED-DICTATOR GERARDO MACHADO ISLA DE LA JUVENTUD

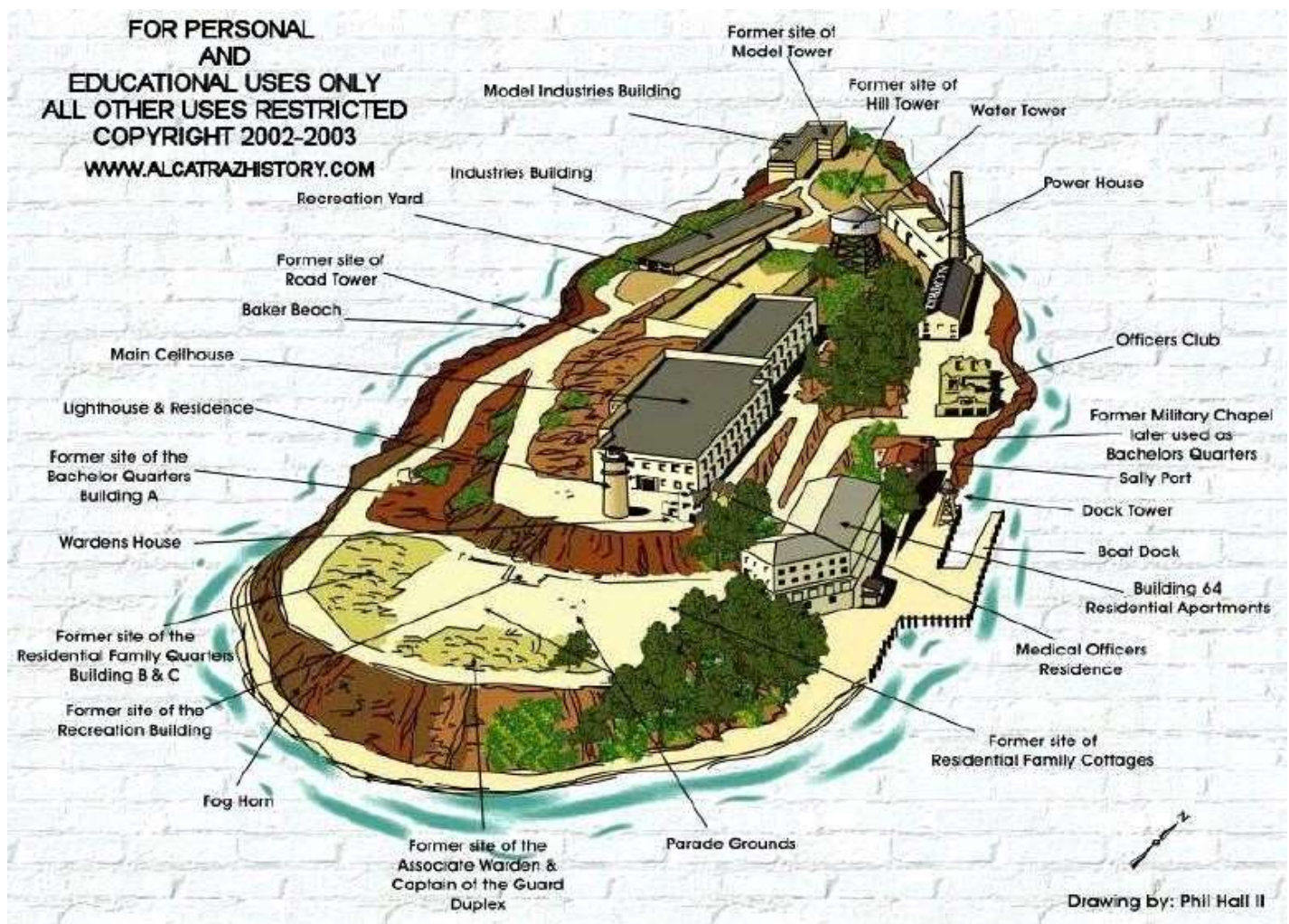


3.1. View of Prison Modelo



3.2. Interiors of Prison Modelo showing the Centrally located monitor room like the initial Panoptical concept

4. ALCATRAZ FEDERAL PENITENTIARY (1934), SAN FRANCISCO



4.1. View showing various spaces in the Alcatraz Federal Penitentiary

5. LEOBEN JUDICIAL COMPLEX (2004), LEOBEN, AUSTRIA , DESIGNED BY HOHENSINN ARCHITEKTUR



5.1. View showing the fancy glass façade of Leoben Judicial Complex.



5.2. An inmate playing sports in the rehabilitation section



5.3. The interiors of the prison are designed to be equally fancy as the exteriors.

6. MAASBERG JUVENILE DETENTION LIVING (2011), MAASBERG, NETHERLANDS, UARCHITECTS



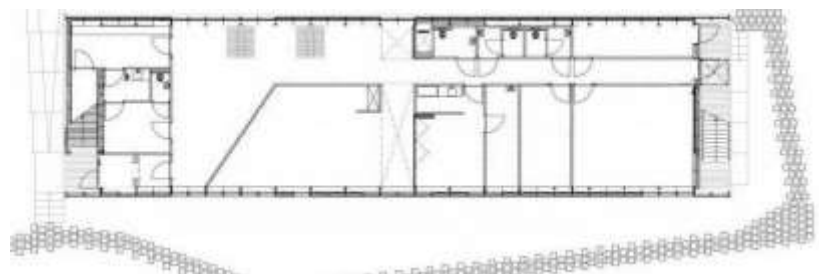
6.1. Maasberg Juvenile Detention Living situated amidst a forest.



6.2. Decorative fins for the façade treatment that help shade the building during peak Sun hours.



6.3. Indoor activities provided in the form of snooker, table tennis etc..



6.4. Plan of Maasberg Juvenile Detention Living

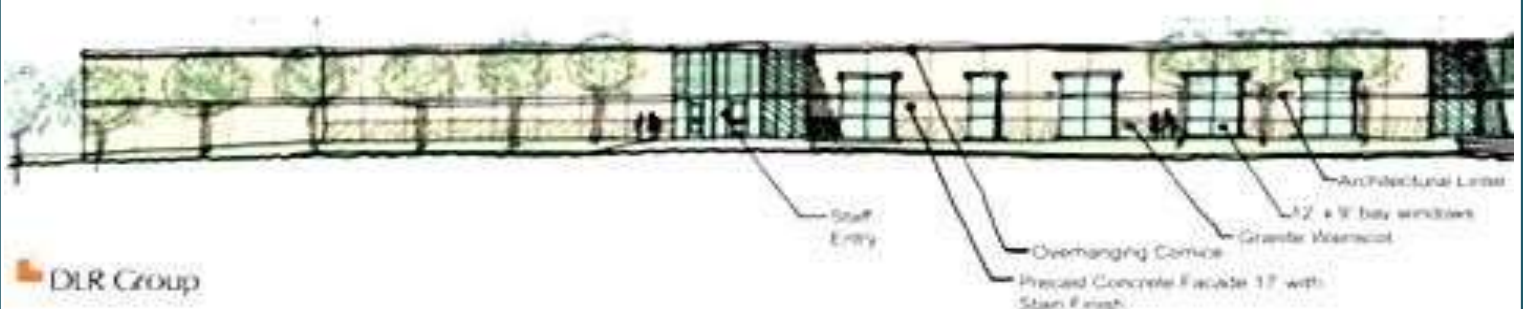
**7. SCORE (SOUTH CORRECTIONAL ENTITY) (2011), DES MOINES, IOWA LR
GROUP, WILLIAM BUURSMA.**



7.1. View of the South Correctional Entity exposing the glass façade increasing the transparency of the correctional facility.



7.2. Birds eye view of South Correctional Entity surrounded by dense plantations on all sides, Away from the city for the purpose of security.

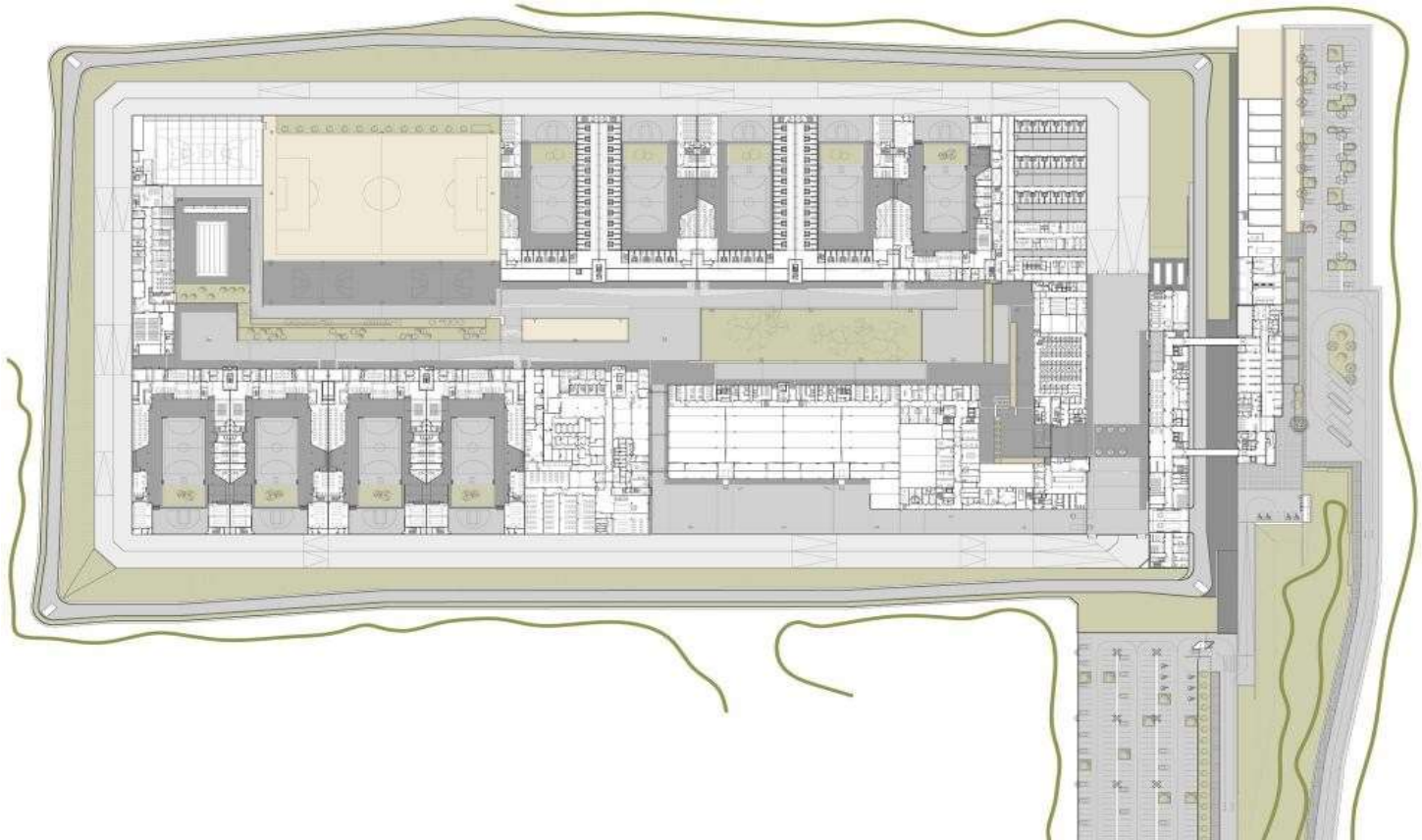


7.3. Schematic section of South Correctional Entity showing various architectural features used.

8. MAS D'ENRIC PENITENTIARY (2012), CATALONIA, SPAIN AIB ESTUDI ,SLP, ESTUDI PSP AND SCP ARCHITECTURE



8.1. View of Mas D'Enric Penitentiary




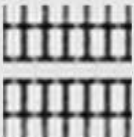



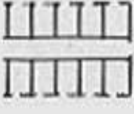

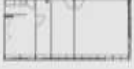





8.2. Rectangular Plan of Mas D'Enric Penitentiary



8.3. Sections of Mas D'Enric Penitentiary

SUMMARY ANALYSIS:

Name and Year		Planning	Typical cell	Façade semantics	Materials	Additional information
The Panopticon (The concept)	1800			-	-	It was the first conceptual design of a prison with mass incarceration.
The Eastern State Penitentiary, Philadelphia	1829			Massive exposed stone walls, Gothic Revival style.	Stone	Area -11 acres Closed in 1971 Cell -8 x 12 x 10 ft.
Prison Modelo, Cuba	1928			Rotunda style prison blocks, miniscule rectangular windows	Stone	-
Alcatraz Federal Penitentiary, San Francisco	1934			Painted stone façade, rectangular shutter windows	Steel, Concrete, wood and Limestone.	Area -22.23acres Closed in 1963 Cell -5 x 9 ft.
Leoben Judicial Complex , Leoben, Austria	2004	-	-	Glass façade, vertical steel mullions, delicate appearance	Steel, Concrete, Wood	Area- 6acres
Maasberg Juvenile Detention Living , Maasberg, Netherlands	2011			Transparent building, light appearance, merges with woodlands	Steel, Aluminum, Wood	Fragile and sensitive for reformation of youngsters.
SCORE (South Correctional Entity) , Des Moines, Iowa	2011		-	Glass façade, transparency and openness reflected	Glass, Steel, Concrete	Area- 5acres
Mas d'Enric Penitentiary, Catalonia, Spain	2012			Colorful, organic, interactive facade	Glass, Steel, Concrete	Area- 18acres

INFERENCE OF STUDY:

Cells:

- The planning of the cells have evolved from being radially situated with a centrally located monitoring block to conventional rectangular cells.

- This is due to the inventions of technologies & monitoring systems which do not require a guard to be physically present, but virtually present.

Façade Semantics:

- The façade of the prison buildings earlier used to be extremely dominant and massive pronouncing that the structure is a place of confinement.

- As time has passed, the external appearance of these buildings has been made softer and fancier than earlier making these buildings blend with the surrounding buildings in the present scenario.

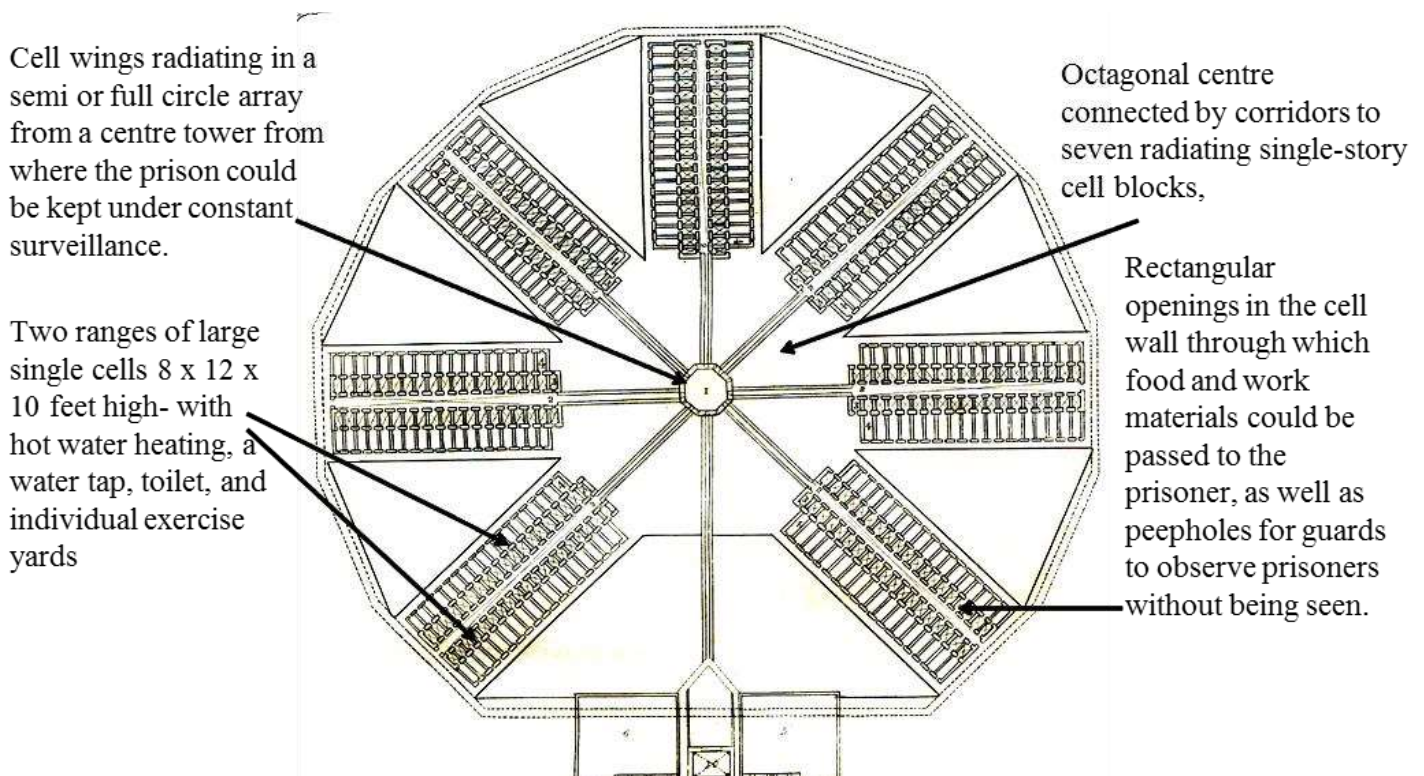
Materials:

- In terms of materials, it started off with stone being the most dominant material, then concrete and wood came in the picture, followed by the use of glass, steel and aluminum.

DETAILS OF CELLS:

Architect: John Haviland

He found most of his inspiration for the penitentiary from prisons and asylums built beginning in the 1780s in England and Ireland.



Toilets:

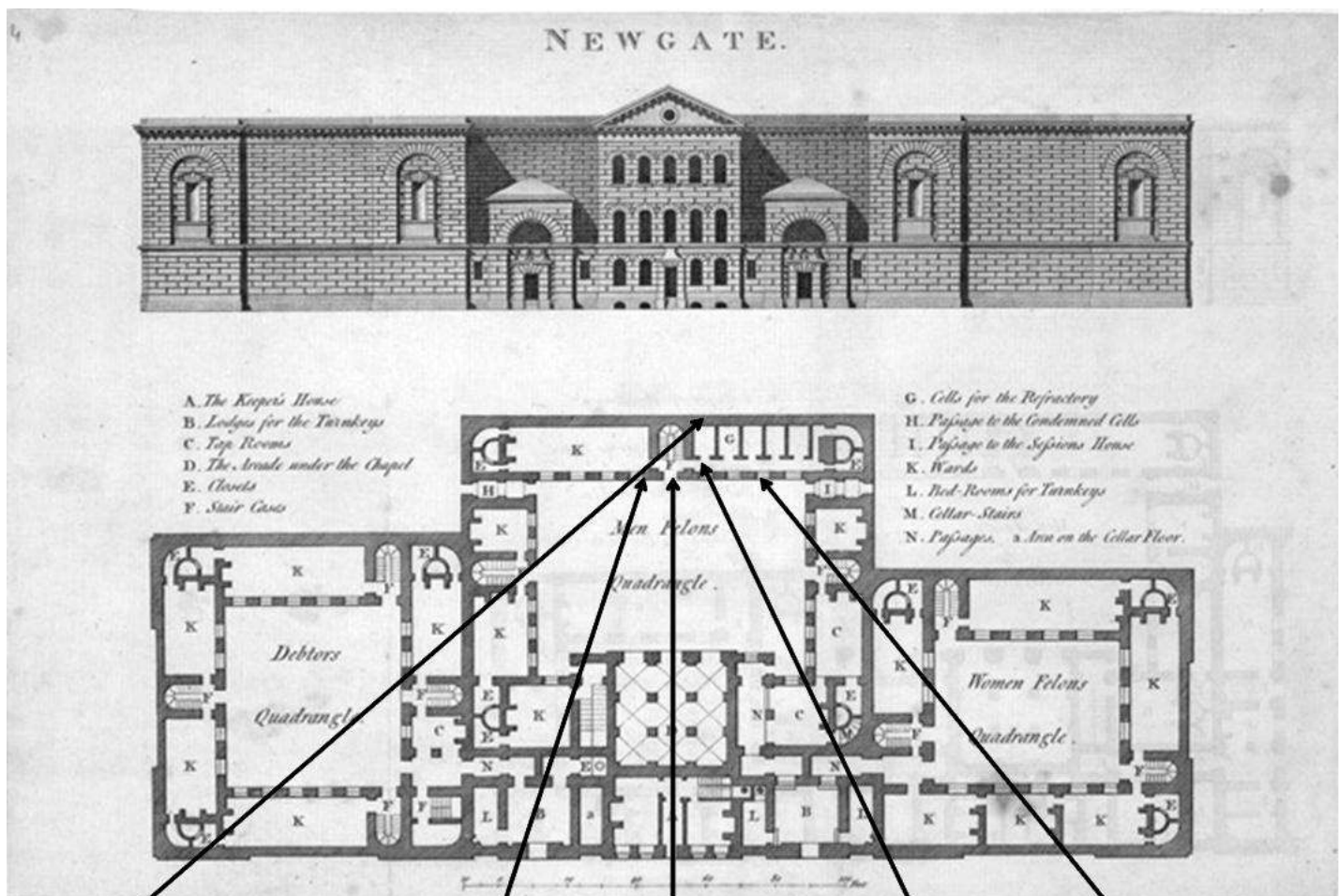
To minimize the opportunities for communication between inmates Haviland designed a basic flush toilet for each cell with individual pipes leading to a central sewer which he hoped would prevent the sending of

messages between adjacent cells. Despite his efforts, prisoners were still able to communicate with each other and the flushing system had to be redesigned several times.

Light:

Each cell was lit only by a single lighting source from either skylights or windows, which was considered

the "Window of God" or "Eye of God".



The cells are like a stone dungeon, 8 ft. long by 6 ft.

All the prisoners under sentence of death are removed from the day-room at 5p.m. in the afternoon, and locked up in these cells, where they are allowed a candle until 10p.m.; and here they remain until seven next morning.

Entrance is by a narrow and obscure stair-case leading to a dark passage, in which a charcoal stove casts a lurid tint over the objects in its immediate vicinity, and diffuses warmth around.

On the left-hand side of this passage, the massive door of every cell on the story opens

Three of these ranges of cells, one above the other; but in size, furniture and appearance, they are all precisely alike

Criminal Behavior and Psychology

"Stone walls do not a prison make, nor iron bars a
cage."

- Richard Lovelace

6.1. AT THE TIME OF ENTRY TO THE PRISON:

Assuming the convicted being arrested for violation of Penal Codes 211, Armed Robbery, and Burglary, a 459 PC.

A State of being Astray...

- The suspect is picked up at his home, charged, warned of his legal rights, spread-eagled against the police car, searched, and handcuffed while he is being looked upon by surprised and curious neighbours.
- The suspect is then put in the rear of the police car and carried off to the police station, the sirens wailing.
- The car arrives at the station, the suspect is brought inside, formally booked, finger printed and a complete identification is made.
- The suspect is then taken to a holding cell where he is left blindfolded at times, to ponder his fate and wonder what he had done to get himself into this mess.



A State Of Mild Shock

Blindfolded and in state of mild shock over his surprise arrest by the city police, the prisoner is put into a car and driven to the jail for further processing.

He is then brought into the jail and greeted by the warden, who conveys the seriousness of his offense and his new status as a prisoner.

A State of Humiliation...

- The prisoner is systematically searched and stripped naked.
- He was then deloused with a spray, to convey our belief that he may have germs or lice as can be seen in this series of photos.
- This degradation procedure is designed to humiliate prisoners and in part to be sure they weren't bringing in any germs to contaminate our jail.



3.1 prisoners are being frisked and checked for possession of any unwanted items that could be carried within the premises

The prisoner is then issued a uniform. This uniform is expected to be worn at all times with no underclothes. On the front and in back, is his prison ID number. In some jails on each prisoner's right ankle is heavy chain, bolted on and worn at all times. Rubber sandals are the footwear and each prisoner covers his hair with a cap. The chain on the foot, which is uncommon in most prisons, is used in order to remind prisoners of the oppressiveness of environment. Even when prisoners are asleep, they could not escape the atmosphere of oppression. When a prisoner turns over, the chain would hit his other foot, waking him up and reminding him that he is still in prison, unable to escape even in his dreams. The use of numbers is a way to make the prisoners feel anonymous. Each prisoner is called only by his ID number and can only refer to himself and the other prisoners by numbers.



3.2. Prisoners are being asked to change into the uniforms of the facility.

6.2. AT THE TIME OF STAY AT THE PRISON:

Dependence on institutional structure and contingencies...

- Penal institutions require inmates to relinquish the freedom and autonomy to make their own choices and this process requires what is a painful adjustment for most people. Indeed, some people never adjust to it.
- It may seem more or less natural to be denied control over day-to-day decisions and, in the final stages of the process, some inmates may come to depend heavily on institutional decision makers to make choices for them and to rely on the structure and schedule of the institution to organize their daily routine.
- Although it rarely occurs to such a degree, some people do lose the capacity to initiate behavior on their own and the judgment to make decisions for themselves.
- Severely institutionalized persons may find that they no longer know how to do things on their own, or how to refrain from doing those things that are ultimately harmful or self-destructive.

Hyper vigilance, interpersonal distrust, and suspicion...

- Many prisons are clearly dangerous places from which there is no exit or escape, prisoners learn quickly to become hyper vigilant and ever-alert for signs of threat or personal risk.
- Because the stakes are high, and because there are people in their immediate environment poised to take advantage of weakness or exploit carelessness or inattention, interpersonal distrust and suspicion often result.
- Some prisoners learn to project a tough convict veneer that keeps all others at a distance. Indeed, as one prison researcher put it, many prisoners "believe that unless an inmate can convincingly project an image that conveys the potential for violence, he is likely to be dominated and exploited throughout the duration of his sentence."

Emotional over-control, alienation, and psychological distancing...

- Emotional over-control and a generalized lack of spontaneity may occur as a result.
- Prisoners who labor at both an emotional and behavioral level to develop a "prison mask" that is unrevealing and impenetrable risk alienation from themselves and others, may develop emotional flatness that becomes chronic and debilitating in social interaction and relationships.

Social withdrawal and isolation:

- The self-imposed social withdrawal and isolation may mean that they retreat deeply into themselves.
- In extreme cases, especially when combined with prisoner apathy and loss of the capacity to initiate behavior on one's own, the pattern closely resembles that of clinical depression.

Incorporation of exploitative norms of prison culture:

- In addition to obeying the formal rules of the institution, there are also informal rules and norms that are part of the unwritten but essential institutional and inmate culture and code that, at some level, must be abided.
- In many institutions the lack of meaningful programming has deprived them of pro-social or positive activities in which to engage while incarcerated.
- Few prisoners are given access to gainful employment where they can obtain meaningful job skills and earn adequate compensation; those who do work are assigned to menial tasks that they perform for only a few hours a day.
- With rare exceptions those very few states that permit highly regulated and infrequent conjugal visits they are prohibited from sexual contact of any kind.
- Attempts to address many of the basic needs and desires that are the focus of normal day-to-day existence in the free world to recreate, to work, to love necessarily draws them closer to an illicit prisoner culture that for many represents the only apparent and meaningful way of being.

Diminished sense of self-worth and personal value:

- Prisoners typically are denied their basic privacy rights, and lose control over mundane aspects of their existence that most citizens have long taken for granted.
- They live in small, sometimes extremely cramped and deteriorating spaces.
- A 60 square foot cell is roughly the size of king-size bed), have little or no control over the identity of the person with whom they must share that space (and the intimate contact it requires, often have no choice over when they must get up or go to bed, when or what they may eat, and on and on.
- Some feel infantilized and that the degraded conditions under which they live serve to repeatedly remind them of their compromised social status and stigmatized social role as prisoners.

- In extreme cases of institutionalization, the symbolic meaning that can be inferred from this externally imposed substandard treatment and circumstances is internalized; that is, prisoners may come to think of themselves as "the kind of person" who deserves only the degradation and stigma to which they have been subjected while incarcerated.

Post-traumatic stress reactions to the pains of imprisonment:

- For some prisoners, incarceration is so stark & psychologically painful that it represents stress severe enough to produce post-traumatic stress once released.
- Time spent in prison may rekindle not only the memories but the disabling psychological reactions and consequences of earlier damaging experiences like poverty, abusive and neglectful mistreatment, and other forms of victimization.
- The most negative consequences of institutionalization may first occur in the form of internal chaos, disorganization, stress, and fear.
- So, the outward appearance of normality and adjustment may mask a range of serious problems in adapting to the free world.
- Persons who return to the freeworld lacking a network of close, personal contacts with people who know them well enough to sense that something may be wrong.

6.3. AT THE TIME OF TRANSITION FROM PRISON TO HOME:

The psychological consequences of incarceration may represent significant impediments to post-prison adjustment.

- They may interfere with the transition from prison to home, impede an ex-convict's successful re-integration into a social network and employment setting, and may compromise an incarcerated parent's ability to resume his or her role with family and children.
- The range of effects includes the sometimes subtle but nonetheless broad-based and potentially disabling effects of institutionalization prisonization, the persistent effects of untreated or exacerbated mental illness, the long-term legacies of developmental disabilities that were improperly addressed.
- There is little or no evidence that prison systems across the country have responded in a meaningful way to these psychological issues, either in the course of confinement or at the time of release.
- Over the next decade, the impact of unprecedented levels of incarceration will be felt in communities that will be expected to receive massive numbers of ex-convicts who will complete their sentences.
- They return home but also to absorb the high level of psychological trauma and disorder that many will bring with them.
- The implications of these psychological effects for parenting and family life can be profound.
- Parents who return from periods of incarceration still dependent on institutional structures and routines cannot be expected to effectively organize the lives of their children or exercise the initiative and autonomous decision making that parenting requires.
- The continued embrace of many of the most negative aspects of exploitative prisoner culture is likely to doom most social and intimate relations, as will an inability to overcome the diminished sense of self-worth that prison too often instills.
- Effects of the post-traumatic stress of imprisonment & the re-traumatization experiences that the nature of prison life may incur can jeopardize the mental health of persons attempting to reintegrate back into the free world communities from which they came.

Case Studies

“Going to prison is like dying with your eyes open.”
- Bernard Kerik

7.1 SHAHJAHANPUR DISTRICT JAIL, SHAHJAHANPUR

INTRODUCTION

Shahjahanpur district jail, established in 1864.

The jail was initially planned to be in the outskirts of Shahjahanpur. But, due to growth of city, it has practically become a part of city.

GLOBAL LOCATION



World Location

Location In India

Location In U.P.

Location In Shahjahanpur

The climate in Shahjahanpur is warm and temperate. In winter, there is much more rainfall in Shahjahanpur than in summer.

Summer months:

March to June

Temperatures: 30°C to 40°C

Warmest month: June

Monsoon months:

June to Oct

Temperatures: 32°C to 25°C

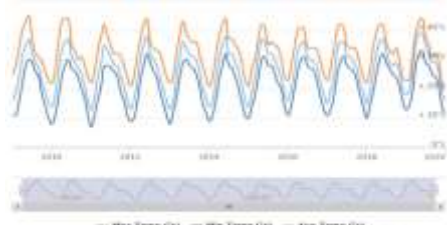
Wettest month: August

Shahjahanpur district jail to:
Shahjahanpur railway station- 3 kms.

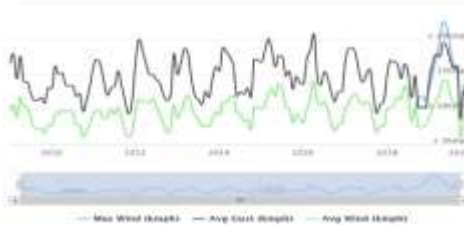
Bus depot- 2 kms.

Nearest hospital- 1.2 kms.

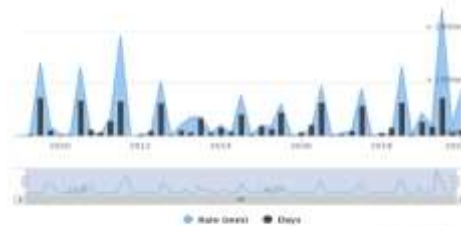
District court- .4 kms.



MAX, MINI, AND AVERAGE TEMPERATURE °C



AVERAGE AND MAX WIND SPEED



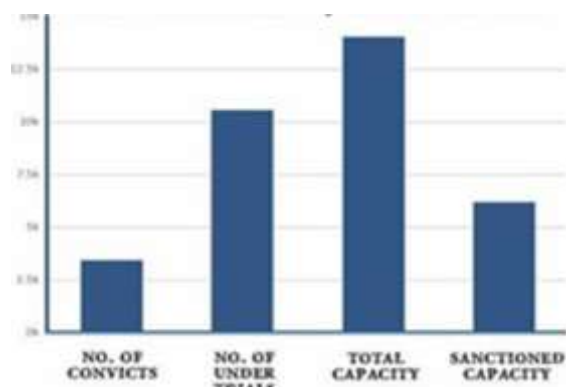
AVERAGE RAINFALL AMOUNT (MM) AND RAINYDAYS

Winter MONTHS: Nov TO Jan

Temperatures: 20°C To 8°C

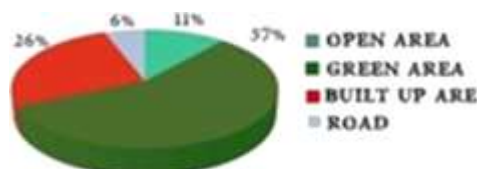
Coldest MONTH: Dec - Jan

CAPACITY AND POPULATION

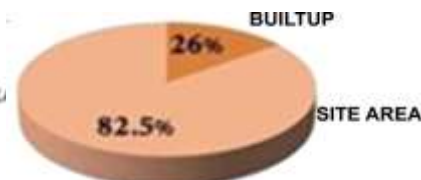


Shahjahanpur district jail, which has the lowest capacity among the three jails at 511, has over 1,600 prisoners (more than three times the capacity)

Area Distribution Of Site:

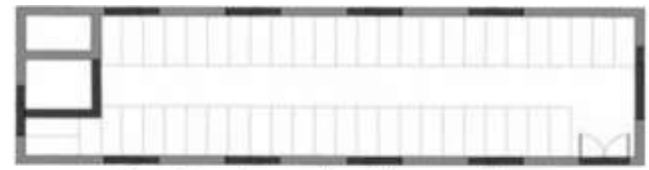


Site Area To Built Up:

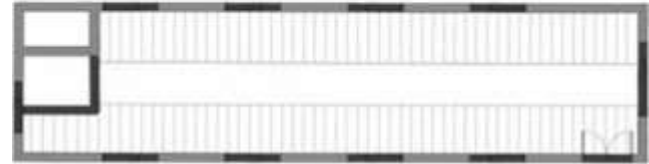




Area Of Distric Jail Shahjahanpur:25 Acres



Sanctioned capacity- 50 pesons/
barrack



Actual population- 100 persons/



Over Crowding In The Barracks

TOPOGRAPHY:

Site Is Mainly Flat And Slope Is Towards The Site.

PLAN OF DISTRICT JAIL



LEGEND:

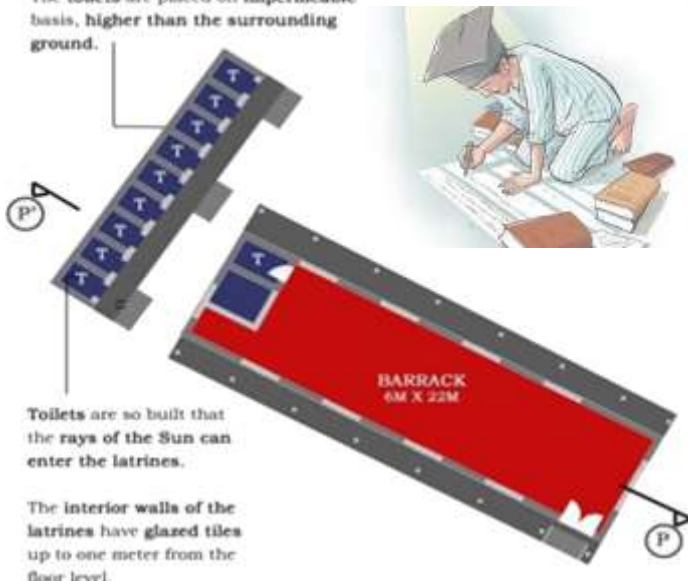
1. CHECK POINT
2. FARMING AREA
3. ADMINISTRATION BLOCK
4. MULAQAT GHAR
5. CHILDREN BARRACK
6. KITCHEN
7. WOMEN BARACK
8. GENRAL BARRACKS
9. HOSPITAL

KITCHEN



SANITATION

The toilets are placed on impermeable basis, higher than the surrounding ground.



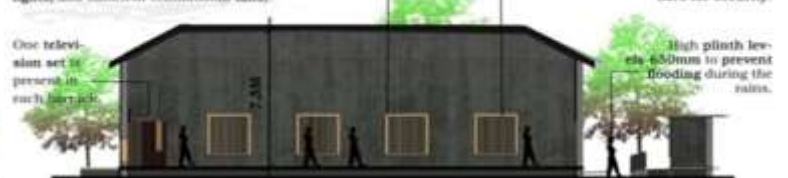
Toilets are so built that the rays of the Sun can enter the latrines.

The interior walls of the latrines have glazed tiles up to one meter from the floor level.

LIGHT AND VENTILATION

Windows along both the sides of the walls and barracks are adequately lit with sufficient lighting (5 tube lights) and sufficient ventilation (5 fans).

The windows have no shutters for the purpose of complete transparency. It consists only of vertical bars for security.



SECTION - PP'

LANDSCAPE



7.2 ADARSH JAIL, LUCKNOW

INTRODUCTION

Spread Over 36 Acres On The Outskirts Of Lucknow, The Lush Grounds Of The Adarsh Karagar Seem Like A Haven For Weary Souls. And Indeed It Is A Humane World For Its 237 Inmates. The Karagar Is A Unique Prison Like No Other, Quite A Contrast From The Hostile, Dank Stereotype Of Indian Prisons. This Model Prison Is An Unusual Experiment That Aims To Reform The Prisoners By Allowing Them The Freedom To Pursue A Livelihood In An Environment As Close To The Outside World As Possible.

GLOBAL LOCATION



Word Location



Location In India



Location In U.P.

DISTANCES BETWEEN



ADARSH DISTRICT JAIL TO:
CHARBAGH RAILWAY STATION-
26.5 KMS.
BUS DEPOT - 25.2 KMS.
NEAREST HOSPITAL - 15.1 KMS.
HIGH COURT - 22.7 KMS.

Summer Months:
March To June
Temperatures:
300c To 400c
Warmest Month:
June

Monsoon Months:
June To Oct
Temperatures:
320c To 250c
Wettest Month:
August

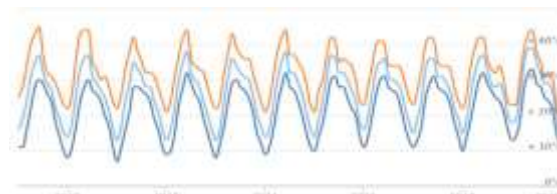
Winter Months:
Nov To Jan
Temperatures:
200c To 80c
Coldest Month:
Dec- Jan

CAPACITY AND POPULATION:

Adarsh Jail, Lucknow Has Capacity Of 600 Prisoners And Population In Jail Is 468 Prisoners.

CLIMATE

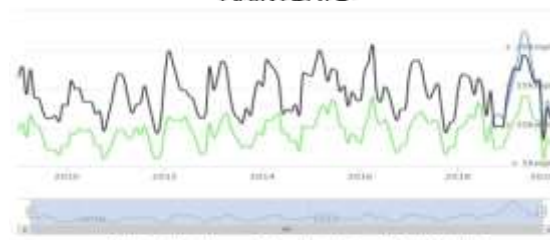
Lucknow Has A Humid Subtropical Climate (Cwa) With Cool, Dry Winters



MAX, MINI, AND AVERAGE TEMPERATURE °C



AVERAGE RAINFALL AMOUNT (MM) AND RAINYDAYS



AVERAGE AND MAX WIND SPEED



SITE PLAN



■ SITE ■ MAIN HIGHWAY ■ CONNECTING ROAD

TOPOGRAPHY:

Site Is Mainly Flat And Slope Is Towards The Site.

WATER SUPPLY:

Water Provided To The Prisoners Through Ground Water.

ELECTRICITY:

Seperate Transformer Provied Inside The Site Of Jail.

PLAN OF ADARSH JAIL



LEGEND:

- 1. CHECK POINT
- 2. MAIN WALL
- 3. MULAQAT SPACE
- 4. GENERAL BARRACKS
- 5. HOSPITAL
- 6. SCHOOL
- 7. WATER
- 8. WORKSHOP



AREA OF ADARSH JAIL,
LUCKNOW: 36 ACRES

LANDSCAPE:



PIPAL



NEEEM



AMLTAS

Literature Studies

"I believe, and I may be wrong, the system sometimes works and sometimes doesn't. Prison is supposed to rehabilitate, but they don't do that in a lot of cases."

- Amaury Nolasco

8.1 TIHAR CENTRAL JAIL, DELHI

INTRODUCTION

Tihar Prisons, also called Tihar Jail and Tihar Ashram, is a prison complex in India and the largest complex of prisons with a site area of 400 acres in South Asia. Run by Department of Delhi Prisons, Government of Delhi. the prison contains nine central prisons. Originally, Tihar was a maximum security prison run by the State of Punjab. In 1966 control was transferred to the National Capital Territory of Delhi.

Beginning in 1984, additional facilities were constructed, and the complex became Tihar Prison. Under the charge of Kiran Bedi, when she was Inspector General of Prisons, she instituted a no. of prison reforms at Tihar, including changing its name to Tihar Ashram.

GLOBAL LOCATION



Word Location Location in India Location in Delhi

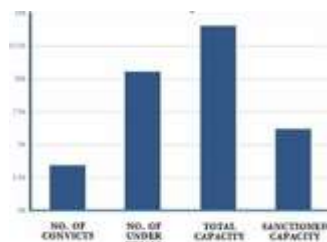
CLIMATE AND SUNPATH ANALYSIS

The climate of Delhi is a monsoon influenced humid subtropical with high variation between summer and winter temperatures and precipitation.

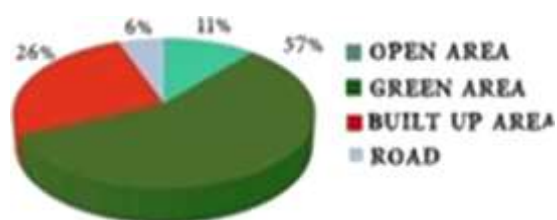
Delhi's version of a humid subtropical climate is marked different from many other humid subtropical cities.

Summer Months:	Monsoon months:	Winter months:
April To June	June to Sep	Oct to Feb
Temperatures:	Temperatures:	Temperatures:
20°C To 45 °C	30°C to 40 °C	0°C to 20 °C
Warmest Month:	Wettest month:	Wettest month:
May	August	Dec & Jan

CAPACITY AND POPULATION 2012:



Capacity: 6,250
Population: 10,533
(as of 31 December 2012)



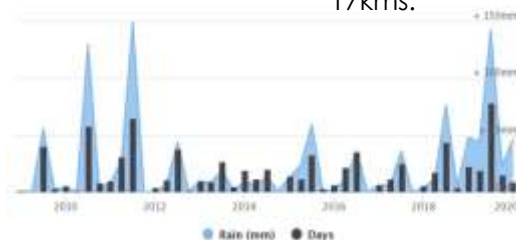
SITE AREA TO BUILT UP

DISTANCES BETWEEN :

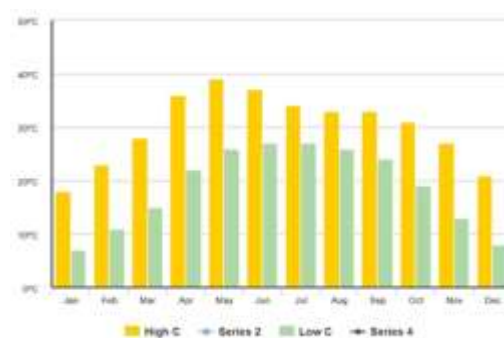


Location of Tilak Nagar

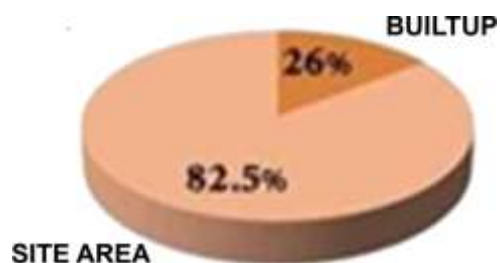
Tihar Central Jail To :
Indra Gandhi International Airport -12 Kms.
Ajmere Railway Station -16 Kms.
Bus Depot-27kms.
Nearest Hospital -8kms.
Delhi High Court -17kms.



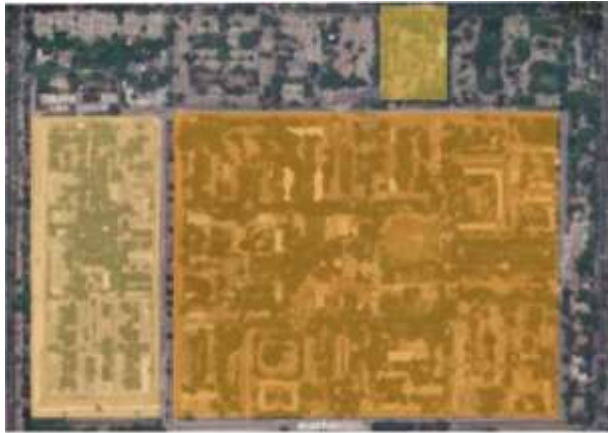
Average Rainfall amount(mm) and rainydays 90



Average High/Low Temperature

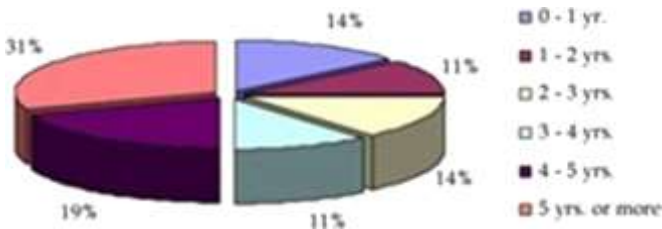


AREA DISTRIBUTION OF SITE:

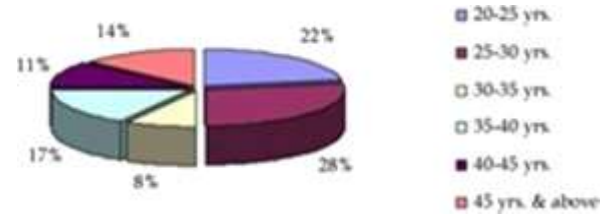


SITE PLAN

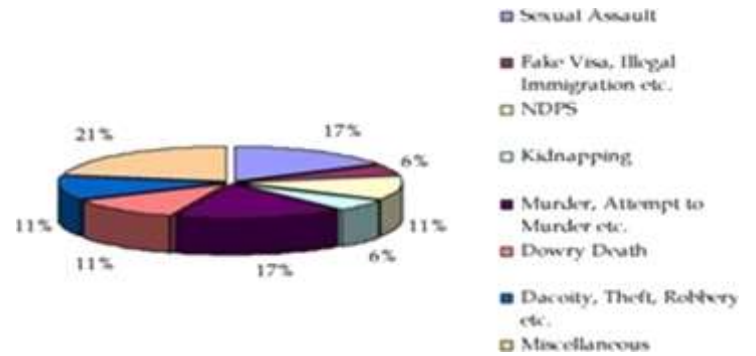
CLASSIFICATION OF INMATES ACCORDING TO THE TIME IN JAIL



CLASSIFICATION OF INMATES ACCORDING TO AGE



CLASSIFICATION OF INMATES ACCORDING TO CRIME



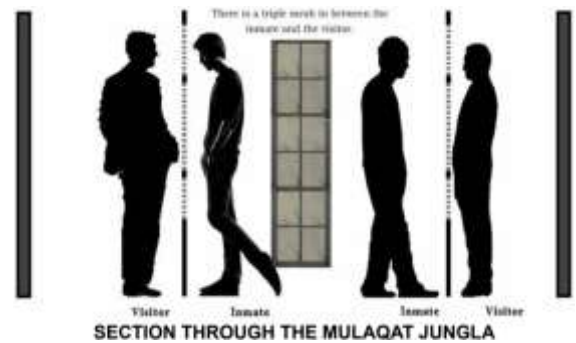
TYPES OF CELLS/BARRACKS:



A VIEW OF A PART OF THE TIHAR ASHRAM



HIGH SECURITY CELL



SECTION THROUGH THE MULAQAT JUNGLA

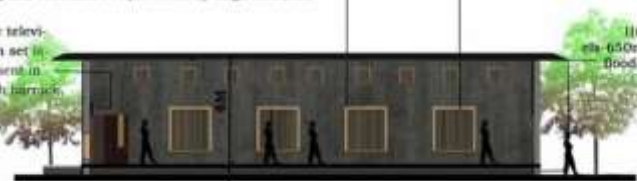
LIGHT AND VENTILATION

Windows along with ventilators on either sides of the barracks. This cuts down on the artificial lighting and ventilation requirement by large amounts.

The windows have no shutters for the purpose of complete transparency. It consists only of vertical bars for security.

One television set is present in each barrack.

High plinth level - 650mm to prevent flooding during the rains.



SECTION - LL'



(A) TYPICAL PLAN FOR INDIVIDUAL CELL



(B) TYPICAL PLAN OF BARRACK



PAGODAS 1.1M X 1.1M

PLAN OF PAGODAS OR MEDITATION ROOM



Sanctioned capacity- 50 persons/ barrack



Actual population- 100 persons/ barrack

OVER CROWDING IN THE BARRACKS

THE ADMINISTRATION BLOCK



KITCHEN



LANDSCAPE



ATTEMPTS MADE FOR THE REFORMATION OF IMPRISONERS:



SPORTS



EVENTS



YOGA



EDUCATION

8.2 STATE PRISON OF EAST JUTLAND, ENNER MARK

INTRODUCTION

State Prison of East Jutland is a Danish prison located at Enner Mark. west of the city of Horsens, Denmark and inaugurated on 2 October 2006. The prison replaced the old Horsens Prison, from which the last prisoners were removed in November 2006. It is the first new Danish prison since The State Prison in Ringe, which was opened thirty years earlier.

The East Jutland prison is very modern in terms of both security and design. Total site area is approximately 65 hectares with 9 buildings in all and a floor floor area of 28,500 m².

GLOBAL LOCATION



Word Location



Location In Denmark



Location In Horsens

DISTANCES BETWEEN :

State Prison Of East Jutland To:
Copenhagen Airport- 268 Kms.
Bus Center, Vrondingvej- 5 Kms.
Horsens Hospital, Levysgade- 11 Kms.
The Courthouse, Skivevej- 116 Kms.

CLIMATE AND SUNPATH ANALYSIS

Denmark Has A Temperate Climate , Because Of Denmark's Northern Location, There Are Large Seasonal Variations In Daylight. There Are Short Days During The Winter, As Well As Long Summer Days.

SUMMER MONTHS:

MARCH TO MAY

TEMPERATURE:

23.5 0C

WARMEST MONTH:

MAY

MONSOON MONTHS:

JUNE TO SEPT.

TEMPERATURE:

17.1 0C

WETTEST MONTH:

JULY

WINTER MONTHS:

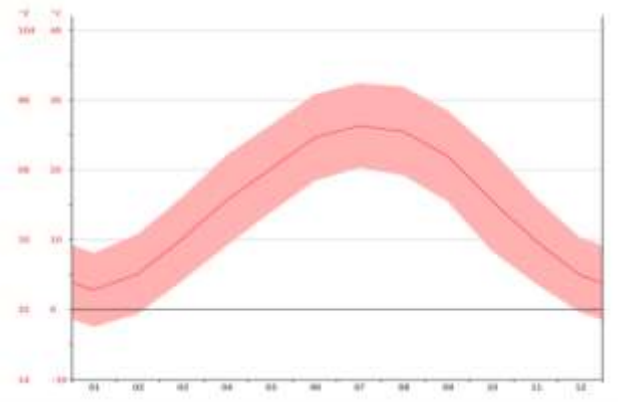
OCT TO FEB

TEMPERATURE:

2.8 0C

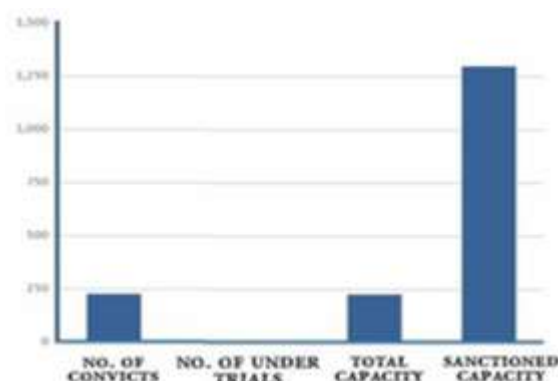
COLDEST MONTH:

JANUARY



TEMPERATURE

CAPACITY AND POPULATION OF STATE PRISON OF EAST JUTLAND AS ON 2019



There are no under trials in this prison. It is meant exclusively for the convicts.

The sanctioned capacity of this prison is almost four times more than the total occupied capacity.

Hence, it is evident that the jail is extremely spacious and is not facing the problem of overcrowding like the other jails in our country.

LEGEND:

1. INFORMATION DESK
2. ADMINISTRATION
3. MEETING AREA (VISITORS)
4. RECREATIONAL BLOCK
5. OUTDOOR SPORTS
6. CELLS
7. WATER BODY
8. STAFF PARKING

TOPOGRAPHY:

The Site Slopes Gently All Along. It Is Made Sure That The Cell Blocks Arc On The Higher Side Of The Slope To Enable Complete Transparency Vision. A Water Body That Lies Centrally On The Lowest Level.

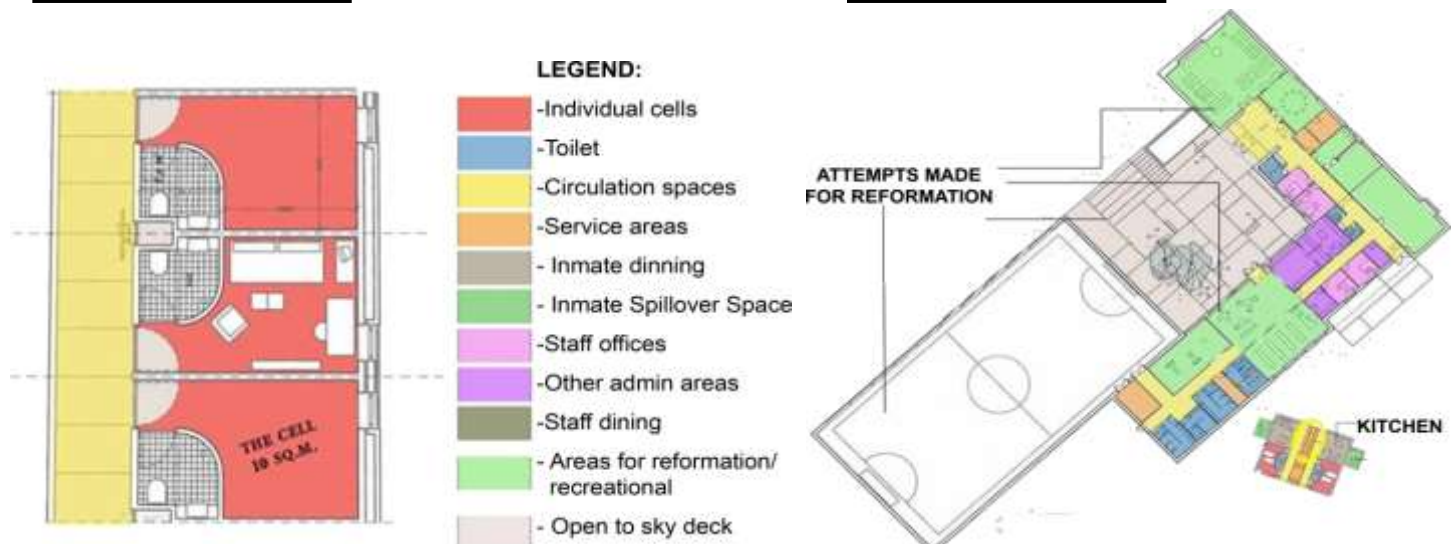
LANDSCAPE:

The Entire Site Is Covered With Lush Grass. The Amounts Of Trees Planted Are Not Too Many, The Reason Being Denmark Is Cold And Shady Most Of The Time Of The Year. Also Lesser The Trees, More Transparent Is The Area Leaving No Place To Hide. There Are Certain Native Trees Like Maples, Birches Etc...



(A)TYPICAL GROUND FLOOR PLAN OF ACCOMODATION

(A)TYPICAL FIRST FLOOR PLAN OF ACCOMODATION



(C)TYPICAL PLAN OF THE CELL

PLANNING:

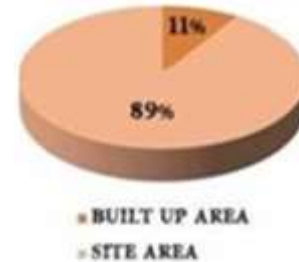
The Complex Is Located In The Open, Hilly Countryside Of Enner Mark West Of The Town Of Horsens, Surrounded By Fields, Grazing Cattle, Hedges And Scattered Farm Buildings.

The Prison Contains eight separate Building Clusters, Linked To The Internal Road Network. The Buildings Are Spread Out. The Prison Has Been Divided Into Various Sections.

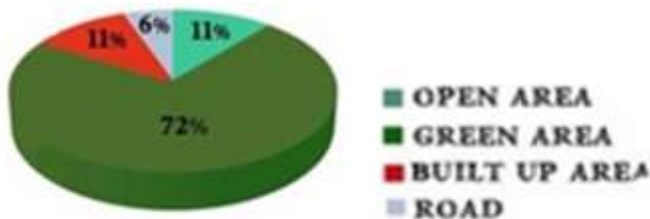
As A Result, The Prison Has Been Organised So That An Entire Community Can Exist Within The Walls.



SITE PLAN



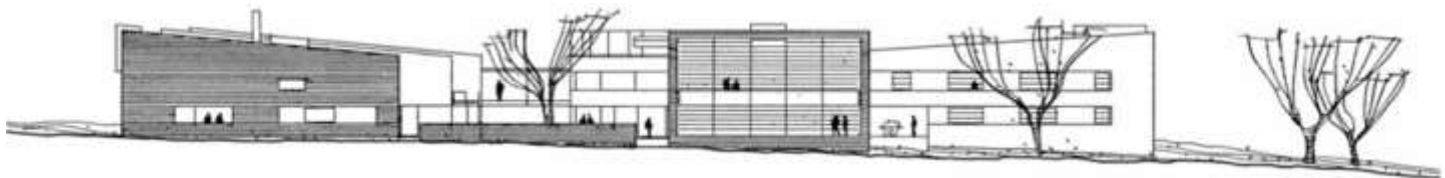
AREA DISTRIBUTION OF SITE:



Each building section consists of four standard sections, each with its own employment area, top security section, cultural facilities (including a church, sports facilities, shop and library).



ELEVATION OF THE RECREATIONAL BLOCK (A)



ELEVATION OF THE RECREATIONAL BLOCK (B)



SECURITY:

The East Jutland Prison Is Very Modern In Terms Of Both Security And Design. Security Measures Include Fingerprint Readers In Stead Of Key S, 8m High Walls And 2 Long Fences. All Outdoor Areas Are Video Monitored And There Area Motion Sensors And Infrared Cameras Throughout The Prison.

WATER SUPPLY:

Water Is Supplied To The Prison By The Municipality Which Uses Groundwater As The Primary Source Of Water.



PARKING:

This Is A Separate Parking Space Provided Within The Campus For Security Vehicles, administration Staff, service Vehicles, Visitors.

Design Brief Analysis

"I turn and turn in my cell like a fly that doesn't know
where to die."

-Antonio Gramsci

This project targets the design urgency at the Yerwada Central Jail, Pune which is facing the problem of overcrowding. It consists of an annex to the existing jail for men which will provide for facilities such as accommodation, education, recreation, healthcare etc... These facilities can be shared by the existing jail as well. There also exists an interaction center adjacent to the annex which comprises of a set of retail stores selling goods manufactured within the jail premises and run exclusively by the ex-prisoners. This place acts as a community space for Yerwada and provides a platform for the ex-prisoners to interact with the common public of the society breaking the barriers of social stigma.

CALCULATIONS:

Sanctioned capacity of Yerwada=2449

No. of convicts =

1225 No. of under

trials = 2002

Detenues =30

Actual capacity = 3257

Hence, no room for 808 inmates approx. = 1000 (Considering future additions) Considering,

60% of 1000 = 600 under trials

36% of 1000 = 360 convicts

4% of 1000 = 40 detenues

POLICIES BY THE MODEL INDIAN PRISON MANUAL BY THE SUPREMECOURT:

Accommodation provided for prisoners, particularly for sleeping, **will meet basic requirements of healthy living.** Due **regard shall be paid to climatic conditions, cubic contents of air, minimum floor space, lighting and ventilation.**

Prisons in the country shall endeavor **to reform and assimilate offenders** in the social milieu by **appropriate correctional treatment.** **Living conditions** in every prison shall be **compatible with human dignity** such as **accommodation, hygiene, sanitation, food, clothing, medical facilities, etc.**

Programmes for the treatment of offenders shall be individualized and shall aim at providing them with opportunities **for diversified education, development of work habits and skills, change in attitude, modification of behavior and implantation of social and moral values.** The State shall **develop vocational training and work programmes** in prisons for all inmates eligible to work.

The aim of such training and work programmes shall be to **equip inmates with better skills and work habits for their rehabilitation**. Young offenders (between 18 to 21 years) shall not be confined in prisons meant for adult offenders. There shall be separate institutions for them.

Government recognizes that **the process of reformation and rehabilitation** of offenders is **an integral part of the total process of social reconstruction**, and, therefore, the development of prisons shall find a place in the national development plans.

In a number of judgments" on various aspects of prison administration, the Supreme Court of India has

laid down three broad principles:

- (i) a person in prison does not become a non-person.**
- (ii) A person in prison is entitled to all human rights within the limitations of imprisonment.**
- (iii) There is no justification in aggravating the suffering already inherent in the process of incarceration.**

"No prisoner can be personally subjected to deprivation not necessitated by the fact of incarceration and the sentence of court.

All other freedoms belong to him – **to read and write, exercise and recreation, meditation and chant, creative comforts like protection from extreme cold and heat, freedom from indignities like compulsory nudity, forced sodomy and other unbearable vulgarity**, movement within the prison campus subject to requirements of discipline and security, the minimum joys of self-expression, to acquire skills and techniques and all other fundamental rights tailored to the limitations of imprisonment".

RIGHTS AND DUTIES OF PRISONERS

➤ Right to Human Dignity

➤ Right to Basic Minimum Needs

Right to fulfillment of basic minimum needs such as adequate diet, health, medical care and treatment, access to clean and adequate drinking water, access to clean and hygienic conditions of living accommodation, sanitation and personal hygiene, adequate clothing, bedding and other equipment.

➤ Right to Communication

Right to communication with the outside world;

(ii) Right to periodic interviews; and

(iii) Right to receive information about the outside world through communication media.

The **programme** should consist of:

- (i) Physical and health education
- (ii) Academic education
- (iii) Social education
- (iv) Vocational education
- (v) Moral and spiritual education
- (vi) Cultural education. Vocational training and work programmes should be treated as essential features of the correctional programmes. The objective of such programmes should be:
 - (vii) Imparting discipline and work culture among inmates.
 - (viii) Developing right attitudes towards work and dignity of labour
- (ix) Promoting
 - (a) physical and mental well-being of inmates
 - (b) proper development of mind through intelligent manual labour
 - (c) spirit of fellowship and a cooperative way of living
 - (d) a sense of group adjustment
- (i) Developing capacity for sustained hard work
- (ii) Building habits of concentration, steadiness, regularity and exactness in work
- (iii) Imparting and improving work-skills
- (iv) Awakenning the self-confidence and self-reliance of inmates
- (v) Training and preparing inmates for achieving lasting social readjustment and rehabilitation

Prisoners sentenced to medium and long terms of imprisonment should be given training in multiple skills so that they are able to compete with the conditions in the labour market outside the prisons.

Prison work programmes should consist of services required by the community such as construction work, masonry, carpentry, plumbing, electric fitting, tailoring, fabrication of ready-made garments, leather work, driving, prison servicing, agriculture, horticulture, dairy, poultry, floriculture, maintenance of diesel engines, maintenance of electric pumps, tractor repairing, automobile servicing and repairing, cane work, basket making, pottery, book binding, typing, computer-operating, handicrafts, stenography, cloth printing, embroidery, hosiery, bakery, namkeen making, paper making, printing, tailoring, weaving, soap making, candle making, toy making, sewing machine repair, food processing, etc.

Showrooms should be opened outside the prison gates, and at other places, for promoting sale of products of prison industry.

- **Outdoor games** like, Cricket, kabaddi, wrestling, volley ball, badminton, football and basket-ball.
- **Gymnastics**
- **Indoor games** like Chess, Ludo and Carrom.
- **Film Shows:** Historical, patriotic, biographical, scientific and educational films, travelogues, documentaries, newsreel, and films dealing with social themes should be shown.
- **Music:** Music has a special significance in the confined atmosphere of a prison. It can bring relief to lonely, distressed and unhappy inmates. It can relieve boredom and promote interest in institutional programmes. Music programmes could consist of radio music, recorded music, group singing, folk music, instrumental music and orchestra.
- **Community and folk dances:** Group and Folk dances could be performed on festivals and social occasions.
- **Drama:** Useful social values and models of behaviour can be presented before the inmates through dramatic performances.
- **Arts and crafts:** Arts and crafts can play an important role in imparting useful values to prisoners. The prisoners can maintain their individuality through these activities
- **Reading:** Inmates can be encouraged to read books, newspapers and magazines. Group reading and guided reading can also be useful for them.
- **Television:** This is the biggest entertainer for prisoners. The channels to be shown, and their timings, should be carefully selected by the Superintendent of Prison

Every prison and allied institution should have an annual sports/cultural meet. Inter-Institution and Inter-State sports meets of inmates should also be organised.

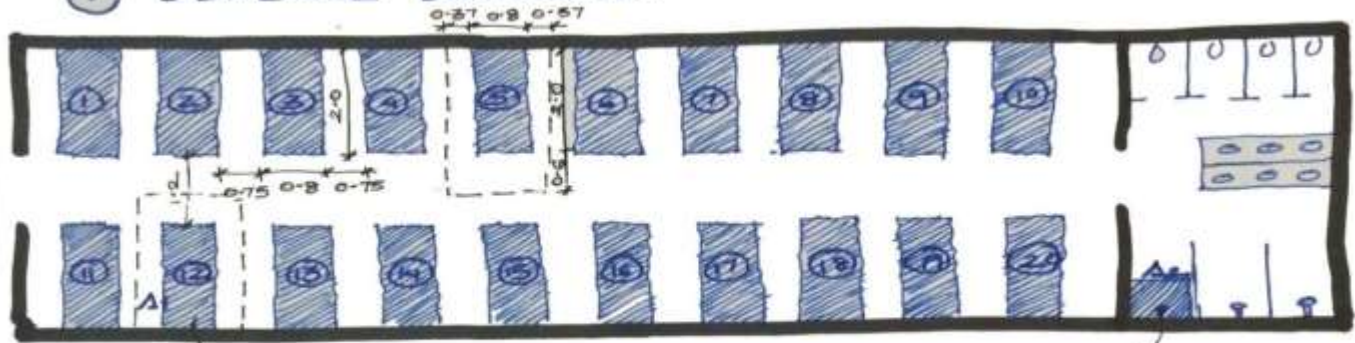
The sports groups from outside. Yoga and meditation should be daily practiced for which the hours should be fixed. Permanent centres of meditation could be opened inside the prison. There shall be a play ground for outdoor games and a community hall for cultural programmes in every prison.

SR. NO.	TITLE	NO.(A)	CASE STUDY-1 (DISTRICT JAIL)	CASE STUDY-2 (ADARSH JAIL)	LITERATURE STUDY-1 (TIHAR JAIL)	LITERATURE STUDY-1 (EAST JUTLAND)	AREA (Basic/ line diagram calculation)	AREA (B) (% added for light,ventilati on, circulation)	TOTAL AREA (A X B)
1	CONTROL BLOCK		250 sq.m.	180 sq.m.	125 sq.m.	192 sq.m.			
A	Entrance lobby	1					4 sq.m.	4.5 sq.m.	4.5 sq.m.
B	Waiting area	1					4 sq.m.	4.5 sq.m.	4.5 sq.m.
C	Legal Department (15 persons)	1					23.4 sq.m.	30 sq.m.	30 sq.m.
D	Clerical Department (15 persons)	1					23.4 sq.m.	30 sq.m.	30 sq.m.
E	CCTV control room (3 persons)	1					4.5 sq.m.	5 sq.m.	5 sq.m.
F	Toilets								
	- Urinals	3					0.78 sq.m.	0.80 sq.m.	2.4 sq.m.
	- WCs	3					1.68 sq.m.	1.70 sq.m.	5.1 sq.m.
	- Wash basins	3					0.96 sq.m.	1.0 sq.m.	3 sq.m.
G	Pantry	1					4 sq.m.	4 sq.m.	4 sq.m.
								TOTAL	88.5 sq.m.
2	ACCOMODATION								
A	DETENUE CELLS:	40	-	-	-	-	10.88 sq.m	11 sq.m.	440 sq.m.
B	UNDER TRIALS:								
-	General barracks	26	132sq.m.	168 sq.m.	150 sq.m.	-	85 sq.m.	90 sq.m.	2340 sq.m.
-	Special barrack	11	-	-	10.4 sq.m.	-	42.5 sq.m.	45 sq.m.	495 sq.m.
-	High security cells	18	-	-	7.84 sq.m.	10 sq.m.	9.6 sq.m.	10 sq.m.	180 sq.m
C	CONVICTS:								
-	General barracks	17	-	168 sq.m.	150 sq.m.	-	85 sq.m.	90 sq.m.	1530 sq.m.
-	Special barrack	7	-	-	10.4 sq.m.	-	42.5 sq.m.	45 sq.m.	315 sq.m.
-	High security cells	12	-	-	7.84 sq.m.	10 sq.m.	9.6 sq.m.	10 sq.m.	120 sq.m
D	COMMON TOILETS	32					0.78 sq.m.	0.80 sq.m.	25.6 sq.m.
	-Urinals	9					1.68 sq.m.	1.70 sq.m.	15.3 sq.m.
	-WCs	9					0.96 sq.m.	1.0 sq.m.	9 sq.m.
	-Wash basins								
E	GUARD BLOCKS	As reqd.							
	**Toilets within the cells/ barracks have been included, the common toilets are considered separately.							TOTAL	5470 sq.m.
3	DINING (For the barracks)		-	-	-	16 sq.m.			
A	Seating area (For 500 persons at a time)	1					415.8 sq.m.	420 sq.m.	420 sq.m.
B	Serving counter	1					4.5 sq.m.	4.5 sq.m.	4.5 sq.m.
C	Toilets	10					0.78 sq.m.	0.80 sq.m.	8 sq.m.
	-Urinals	5					1.68 sq.m.	1.70 sq.m.	8.5 sq.m.
	-WCs	5					0.96 sq.m.	1.0 sq.m.	5 sq.m.
	-Wash basins								
D	Wash area	2					8 sq.m.	10 sq.m.	20 sq.m.
E	Stacking of utensils	1					4.5 sq.m.	4.5 sq.m.	4.5 sq.m.
								TOTAL	470.5 sq.m.

4	KITCHEN (For general barracks)		87 sq.m.	120 sq.m.	270 sq.m.	180 sq.m.			
	Following the principle, kitchen = 40% of dining area	1					180.2 sq.m.	200 sq.m.	200 sq.m.
	*Service entry and fire exit to be provided for the kitchen							TOTAL	200 sq.m.
5	DINING(For temporary holding cells)		-	-	-	-			
A	Seating area(For 40 persons)	1					33 sq.m.	35 sq.m.	35 sq.m.
B	Toilets	1					1.68 sq.m.	1.70 sq.m.	1.7 sq.m.
	-WCs	1					0.96 sq.m.	1.0 sq.m.	1 sq.m.
	-Wash basins								
C	Wash area	1					1.2 sq.m.	1.2 sq.m.	1.2 sq.m.
D	Stacking of utensils	1					1.2 sq.m.	1.2 sq.m.	1.2 sq.m.
								TOTAL	41 sq.m.
6	PANTRY (For detainee cells)	1	-	-	-	-	8 sq.m.	9 sq.m.	9 sq.m.
								TOTAL	9 sq.m.
7	PANTRY (For special barracks)	1	-	-	10sq.m.	-	8 sq.m.	9 sq.m.	9 sq.m.
								TOTAL	9 sq.m.
8	RECREATIONAL ACTIVITIES								
A	Multipurpose hall (300 persons)	1	210 sq.m.	-	490 sq.m.	256 sq.m.	360 sq.m.	380 sq.m.	380 sq.m.
B	Music room (30 persons)	1	-	-	50 sq.m.	78 sq.m.	55.5 sq.m.	56 sq.m.	56 sq.m.
C	Theatre room (30 persons)	1	-	-	95 sq.m.	120 sq.m.	96 sq.m.	100 sq.m.	100 sq.m.
D	Sports ground	1	-	-	800 sq.m.	675 sq.m.	450 sq.m.	500 sq.m.	500 sq.m.
E	Indoor games room	1	-	-	274 sq.m.	175 sq.m.	300 sq.m.	300 sq.m.	300 sq.m.
F	Informal amphitheater (2800 persons)	1	-	-	-	-	-	-	-
								TOTAL	1336 sq.m.
9	REFORMATION ACTIVITIES								
A	Yoga room (40 persons)	2	-	120 sq.m.	168 sq.m.	-	145.6 sq.m.	150 sq.m.	300 sq.m.
B	Meditation block (1 person)	10	-	-	1.20 sq.m.	-	1.21 sq.m.	1.21 sq.m.	12.1 sq.m.
C	Gymnasium (50 persons)	1	-		-	110 sq.m.	75 sq.m.	90 sq.m.	90 sq.m.
D	Lecture room (50 persons)	10	-	60 sq.m.	44 sq.m.	75 sq.m.	30 sq.m.	30 sq.m.	300 sq.m.
E	Workshop								
	-Handicrafts (60 persons)	2					120 sq.m.	125 sq.m.	250 sq.m.
	-Shoe making (60 persons)	1					90 sq.m.	95 sq.m.	95 sq.m.
	-Art & painting (40 persons)	1					72 sq.m.	75 sq.m.	75 sq.m.
	-Typing/ stenography room (30 persons)	1					45 sq.m.	50 sq.m.	50 sq.m.
	-Metal fabrication (60 persons)	1					180 sq.m.	180 sq.m.	180 sq.m.
	-Book binding (75 persons)	1					45 sq.m.	50 sq.m.	50 sq.m.
	-Electronics repairing(60 persons)	1					60 sq.m.	65 sq.m.	40 sq.m.
	-Tailoring (60 persons)	2					135 sq.m.	140 sq.m.	280 sq.m.
F	Counselling room	5	7.5 sq.m.	10 sq.m.	7 sq.m.	9.2 sq.m.	6.25 sq.m.	6.30 sq.m.	31.50 sq.m.
G	Library	1	-	98 sq.m.	296 sq.m.	265 sq.m.	300 sq.m.	300 sq.m.	300 sq.m.
								TOTAL	1954 sq.m.

10	INFIRMARY:								
A	Ward for 40 patients	1					200	210 sq.m.	210 sq.m.
B	Store room	1					30	30 sq.m.	30 sq.m.
C	Dressing cum injection room	1					20	20 sq.m.	20 sq.m.
D	Minor surgery room	1					25	28 sq.m.	28 sq.m.
E	Laboratory	1					20	20 sq.m.	20 sq.m.
F	Medical office cabin	1					15	15 sq.m.	15 sq.m.
G	Isolation rooms for accommodating TB, Leprosy, HIV patients.	6					10	10 sq.m.	60 sq.m.
H	Isolation rooms for mentally ill	4					10	10 sq.m.	40 sq.m.
I	Toilets								
	- Urinals	2					0.78 sq.m.	0.80 sq.m.	1.6 sq.m.
	- WCs	5					1.80 sq.m.	1.85 sq.m.	9.25 sq.m.
	- Wash basins	3					0.96 sq.m.	1.0 sq.m.	3 sq.m.
11	REFORMATION FOR THE EX-PRISONERS:								
A	Retail shop 1 (Furniture)	1					67.5 sq.m.	70 sq.m.	70 sq.m.
B	Retail shop 2 (Handicrafts, paintings etc...)	1					67.5 sq.m.	70 sq.m.	70 sq.m.
C	Retail shop 3 (Clothes and shoes)	1					67.5 sq.m.	70sq.m.	70 sq.m.
D	Retail shop 4 (Grocery store and bakery items)	1					20 sq.m.	25 sq.m.	25 sq.m.
E	Retail shop 5 (Home furnishings)	1					67.5 sq.m.	70 sq.m.	70 sq.m.
F	Restaurant (100 persons)	1					235 sq.m.	250 sq.m.	250 sq.m.
G	Informal amphitheater (500 capacity)	1					-	-	-
H	Public Toilets	10					0.78 sq.m.	0.80 sq.m.	8 sq.m.
	Gents:	3					1.68 sq.m.	1.70 sq.m.	5.1 sq.m.
	-Urinals	3					0.96 sq.m.	1.0 sq.m.	3 sq.m.
	-WCs	4					1.68 sq.m.	1.70 sq.m.	6.8 sq.m.
	-Wash basins Ladies:	4							
	-WCs						0.96 sq.m.	1.0 sq.m.	4 sq.m.
	-Wash basins								
	**Toilets within the shops have been included, the public toilets are considered separately.							TOTAL	582 sq.m.
11	WATCH TOWERS	As reqd.							
								TOTAL OF ALL ACTIVITIES	10597 sq.m.
	Adding 15% for circulation 15% of 10597 = 1590 sq.m. 10597 + 1590 = 12187 sq.m = 12200 sq.m.							TOTAL CARPET AREA	12200 sq.m.

① GENERAL BARRACK:



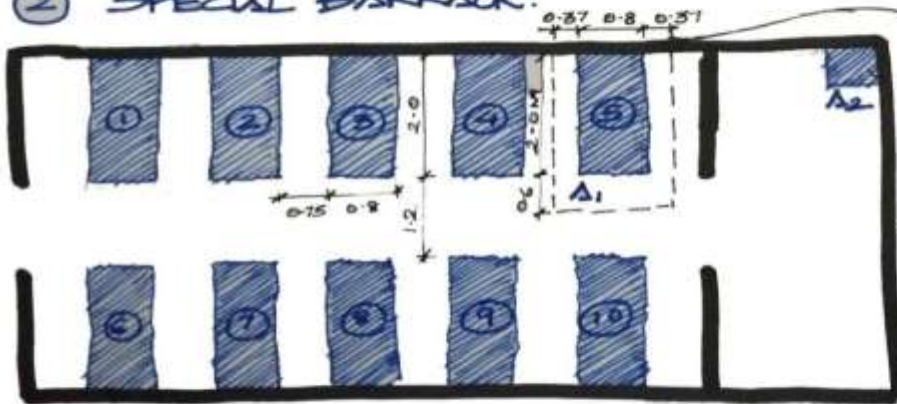
$$\Delta_1 = (0.75 + 0.8) \times (0.6 + 2.0) \text{ m} \\ = 1.55 \times 2.36 = 3.658 \text{ m}^2 \text{ for 1 inmate.}$$

$$\Delta_2 = 0.6 \text{ m}^2 \text{ per inmate.}$$

$$\text{Area for 1 inmate (A)} \\ = 3.658 + 0.6 = 4.25 \text{ m}^2$$

$$\text{Area for 20 inmates} \\ = 20 \times 4.25 = \boxed{85 \text{ m}^2}$$

② SPECIAL BARRACK:



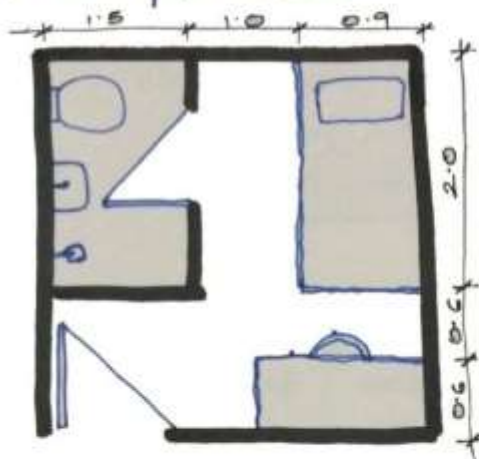
$$\Delta_1 = 3.658 \text{ m}^2 / \text{inmate}$$

$$\Delta_2 = 0.6 \text{ m}^2 / \text{inmate}$$

$$A = (3.658 + 0.6) \text{ m}^2 \\ = 4.25 \text{ m}^2$$

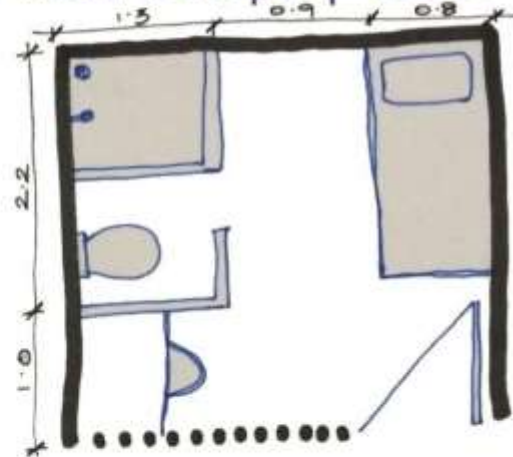
$$\text{Area for 10 inmates} \\ = \boxed{42.5 \text{ m}^2}$$

③ DETANQUE CELL:



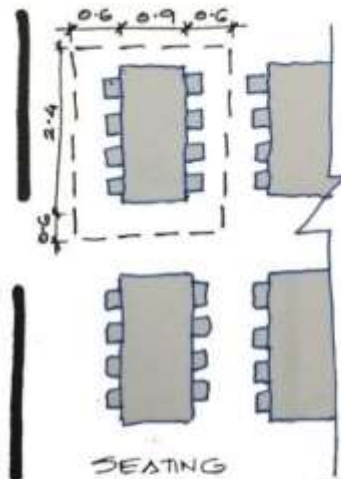
$$A = L \times W \\ = 3.2 \times 5.4 = \boxed{10.88 \text{ m}^2}$$

④ HIGH SECURITY CELL:



$$A = L \times W \\ = 3.2 \times 3 = \boxed{9.6 \text{ m}^2}$$

⑤ DINING SPACE (GENERAL BARRACKS):



$$\text{Area for 1 table} = L \times W = 2.2 \times 0.9 = 1.98 \text{ m}^2$$

Inmates to dine at one time = 500

$$500 / 8 (8 \text{ persons / table}) = 62.5 \approx 63 \text{ tables}$$

$$\therefore 63 \times 1.98 = 124.74 \text{ m}^2 \approx 125 \text{ m}^2$$

According to N.B.C.:

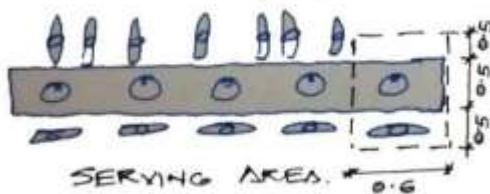
W.C. = 1 per 100 ; Urinals = 1 per 50

Wash basins = 1 per 100.

$$\therefore 5 \text{ W.C.} = 5 \times 1.70 = 8.5 \text{ sq.m.}$$

$$10 \text{ Urinals} = 10 \times 0.80 = 8 \text{ sq.m.}$$

$$5 \text{ Wash basins} = 5 \times 1 = 5 \text{ sq.m.}$$



$$\text{Serving area} = 1.5 \times 0.6 = 0.9 \times 5 = 4.5 \text{ m}^2$$

$$\text{Washed vehicles stacking} = 4.5 \text{ m}^2$$

$$\text{Total dining space} = 125 + 8.5 + 8 + 5 + 4.5 + 4.5 = 150.5 \text{ m}^2$$

⑥ KITCHEN (FOR GENERAL BARRACKS):

Considering 40% of Dining area

$$= 40\% \text{ of } 150.5$$

$$= 60.2 \text{ sq.m.}$$

⑦ DINING (FOR DETACHE CELLS):

$$\text{Area of 1 table} = 6.6 \text{ m}^2$$

Inmates to dine at 1 time = 40

$$40 / 8 (8 \text{ persons / table}) = 5$$

$$\therefore 5 \times 6.6 = 33 \text{ m}^2 \approx 35 \text{ m}^2$$

According to N.B.C.,

W.C.s = 1 per 100 ; Washbasins = 1 per 100.

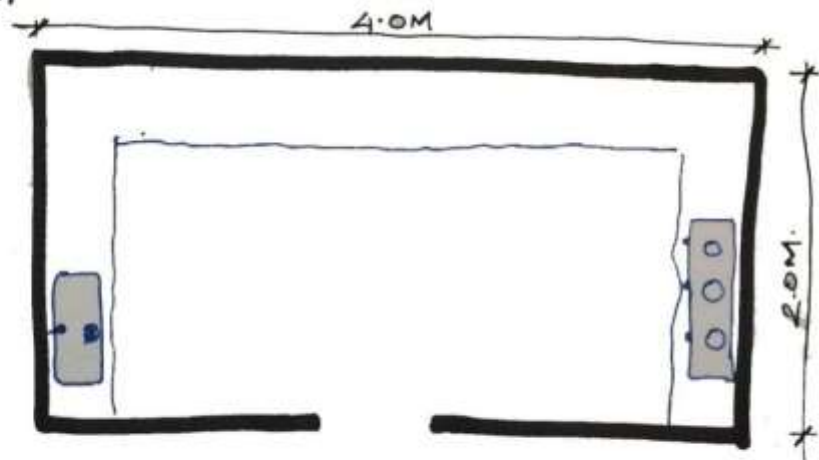
$$\therefore 1 \text{ W.C.} = 1 \times 1.70 = 1.70 \text{ m}^2$$

$$1 \text{ Wash basin} = 1 \times 1 = 1 \text{ m}^2$$

$$\text{Stacking area} = 1.2 \text{ m}^2$$

$$\text{Total dining area} = 35 + 1.70 + 1 + 1.2 = 38.9 \text{ m}^2$$

⑧ PANTRY:



$$A = 4 \times 2 = 8 \text{ m}^2$$

⑨ MULTIPURPOSE HALL:

- Considering $1.2 \text{ m}^2/\text{person}$
300 inmates

$$\text{Total area} = 300 \times 1.2 = 360 \text{ m}^2$$

⑩ MUSIC ROOM:

Considering $1.85 \text{ m}^2/\text{person}$
30 persons at one time.

$$30 \times 1.85 = 55.5 \text{ m}^2$$

⑪ THEATRE ROOM:

Considering $3.2 \text{ m}^2/\text{person}$
30 persons at a time.

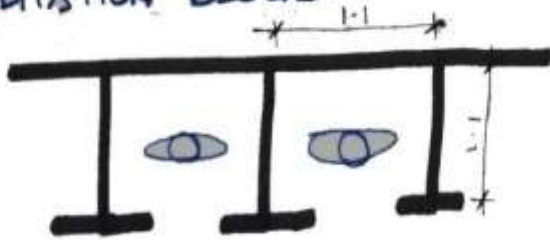
$$30 \times 3.2 = 96 \text{ m}^2$$

⑫ AMPHITHEATRE:

Considering $1.5 \text{ m}^2/\text{person}$
2800 persons at a time.

* Calculations will defer considering it is going to be open to sky & merging with the landscape.

13 MEDITATION BLOCKS:

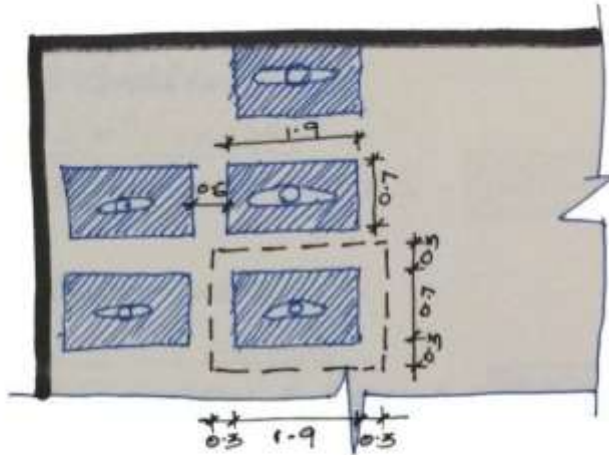


$$\Delta \text{ of 1 block} = 1.1 \times 1.1 = 1.21 \text{ m}^2$$

10 blocks.

$$\text{Total area} = 12.1 \text{ m}^2$$

14 YOGA ROOM:



Considering 40 persons

$$\text{Area for 1 person} = (2.8 \times 1.3) = 3.64 \text{ m}^2/\text{person}$$

$$\text{Total area} = 3.64 \times 40 = 145.6 \text{ m}^2$$

15 GYM:

Considering $1.5 \text{ m}^2/\text{person}$.

79% of the population is between 18-60 yrs.

79% of 1000 = 790 persons.

50 persons at a time

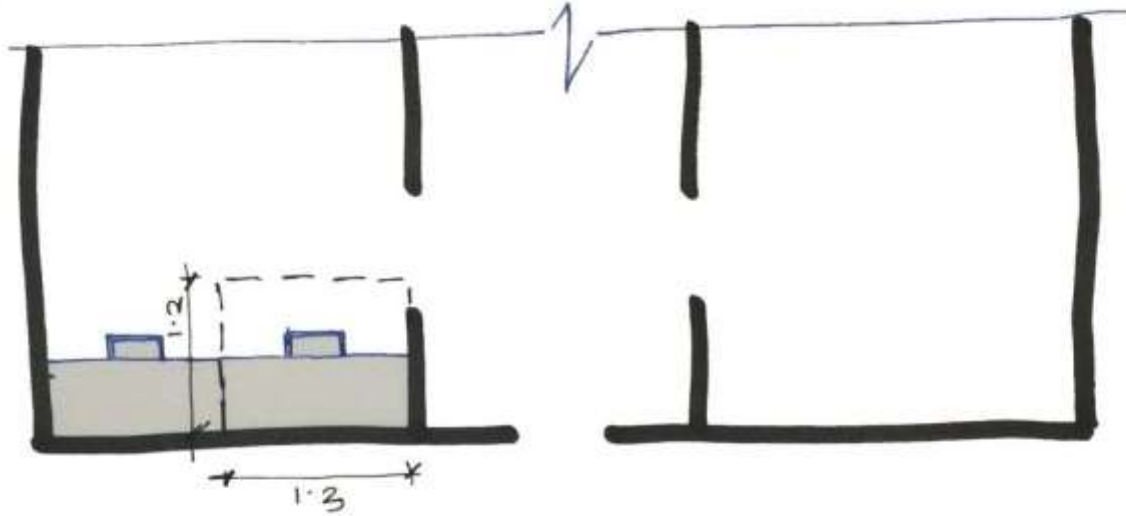
$$= 50 \times 1.5 = 75 \text{ m}^2$$

16 LECTURE ROOM:

Considering $0.6 \text{ m}^2/\text{person}$.

$$50 \text{ persons} = 50 \times 0.6 = 30 \text{ m}^2$$

21 CONTROL BLOCK:



Entry = $4m^2$

Waiting = $4m^2$

Area of one workstation = $1.2 \times 1.3 = 1.56m^2$

Area of 30 workstations (15 Legal, 15 clerical dept)

$30 \times 1.56 = 46.8m^2 \approx 23.4m^2/\text{dept.}$

Pantry = $4m^2$

Toilets

W.C = $1/15$ persons = $3 \times 1.7 = 5.1m^2$

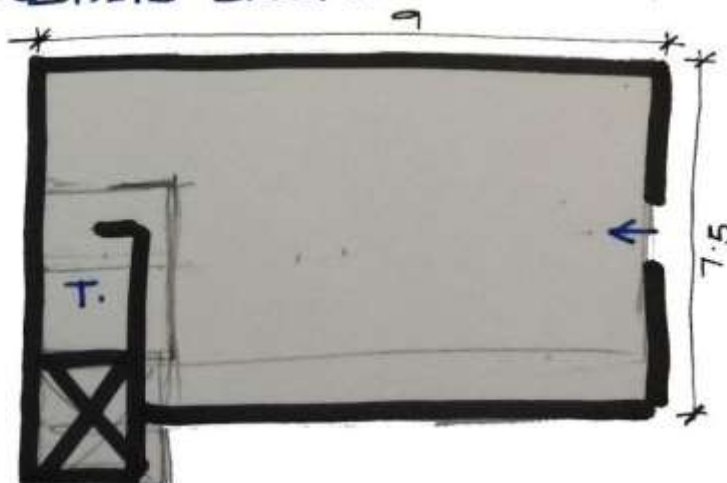
Urinals = $1/15$ persons = $3 \times 0.80 = 2.4m^2$

Wash basin = $1/15$ persons = $3 \times 1 = 3m^2$

CCTV control room = $4.5m^2$

Total control block area = $69.8m^2$

22 RETAIL SHOPS:



Area for retail

shop = 9×7.5

= $67.5m^2$

Site Analysis

"It isn't true that convicts live like animals, animals have more room to move around."

-Mario Vargas Llosa

SITE ANALYSIS

CRITERIA FOR SELECTION

Shahjahanpur Distric Jail ,Establised In 1864.

The Jail Was Initially Planned To Be In The Outskirts Of Shahjahanpur. But,due To Growth Of City, It Has Parctically Become A Part Of City.

Off Lately, The Jail Is Facing A Major Issue Of Overcrowding Due The Ever Increasing Rate Of The Prisoners Being Imprisoned. The Sanctioned Capacity Of The Jail Is 577 Whereas, The Current Population Is 1677 Inmates. This Shows That Almost 2/3rd Of The Population Lacks

Accomodation, Sanitation, Recreation, Reformation And All The Other Facilities Of The Jail.

Another Important Reason Behind The Selection Of This Site Is That There Have Been Talks Of Extending This Campus Which Will Make This A Live Proposal For The Jail Campus.

GLOBAL LOCATION



Word Location Location in India Location in Delhi

ACCESS TO THE SITE

Shahjahanpur Railway Station-23.5 Kms.

Shahjahanpur Gov Bus Depot-23 Kms.

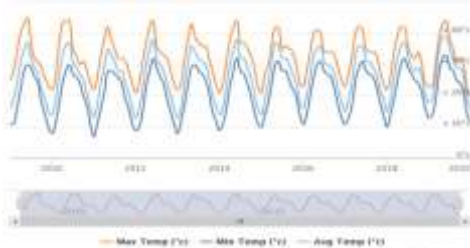
Nearest Hospital:10.1Kms.

Shahjahanpur District Court-16 Kms.



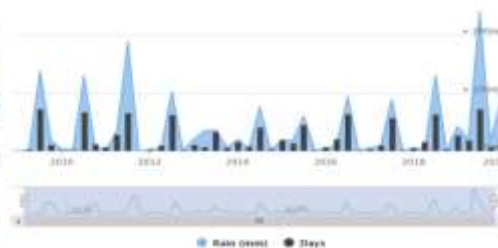
CLIMATE

The Climate In Shahjahanpur Is Warm And Temperate. In Winter, There Is Much More Rainfall In Shahjahanpur Than In Summer.



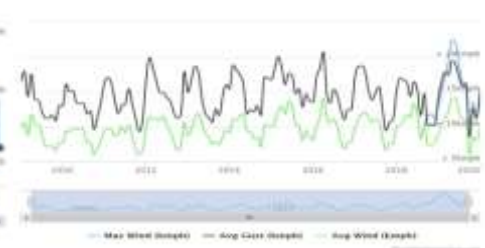
Max, Mini, And Average Temperature 0c

SUMMER MONTHS:
MARCH TO JUNE
TEMPERATURES:
300C TO 400C
WARMEST MONTH:
JUNE



Average Rainfall Amount (mm) and Rainydays

MONSOON MONTHS:
JUNE TO OCT
TEMPERATURES:
320C TO 250C
WETTEST MONTH:
AUGUST



Average And Max Wind Speed

WINTER MONTHS:
NOV TO JAN
TEMPERATURES:
200C TO 80C
COLDEST MONTH:
DEC- JAN

VEGETATION

The Dhak And Bamboo Are The Common Trees, Found Throughout The District. The Northern Portion Of The District Consists Of Sal Trees Which Is Locally Called 'koron'. Similarly, The Stretches Of Open Grass Waste Are Also Found. They Are Of Great Use As Supplying Thatching Grasses, Like Gandar Or Panai, Kans (*Saccharum spontaneum*), Sarpet, Santha And Munj. The Other Trees Found Throughout The District are Mango (*Mangifera Indica*), Babul (*Acacia Arabica*), Sissoo (*Dalbergia Sissoo*), semal (*Salmalia Malabarid*), Siris (*Albizia Species*), Tamarind (*Tamarindus Indica*), pipal (*Ficus Religiosa*), Bargad (*Ficus Bengalensis*), Pakar (*Ficus Indica*), And Gular (*Ficus Glomerata*).



BAMBOO



BARGAD



SEMAL



BABUL

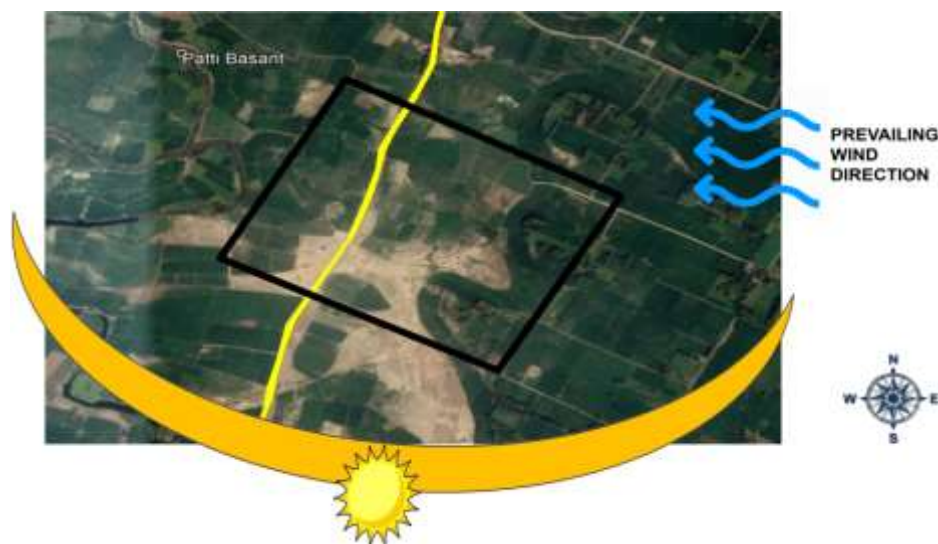
TOPOGRAPHY

Site Is Mainly Flat And Slope Is Towards The Site.

SOIL TYPE

The Soil Type Is Sandy Loam, Loam, Clay Loam. Safe Bearing Capacity Of Soil Is 132 Kv/Msq.

SUN ORIENTATION



SITE PHOTOGRAPHS:



Design Data

"There is a close relationship between flowers and convicts.
The fragility and delicacy of the former are of the same
nature as the brutal insensitivity of the latter."

-Jean Genet

This project consists of a central jail and a reformation center which aims at providing a conducive and habitable environment for the inmates to assist their process of rehabilitation and reformation. It also consists of an interaction center which enable breaking of the barriers and social stigma between the ex-prisoners and the society. The design brief includes areas such as:

- Administration facilities limited to the requirements of the annex
- Typologies of accommodation to tackle the problem of overcrowding
- Dining and kitchen facilities
- Infirmary or health center
- Education zone- Classrooms where various subjects will be taught
- Sacred zone- Spaces like prayer halls, meditation cells, library
- Recreational zone- Indoor games, informal amphitheater, sports ground etc...
- Interaction center- A set of retail stores selling goods manufactured within the prison premises run

exclusively by the ex- prisoners

PRISON ARCHITECTURE BY THE INDIAN PRISON MANUAL:

Prison architecture has to be based on the following:

➤ The location of a new institution will be decided on the basis of:

- (a) the functions which the institution has to perform
- (b) the training and treatment emphasis
- (c) programme content of the institution

➤ New institutions will not be constructed near easily flooded and inundated areas, frontiers and international borders, sub-marginal land areas, sea-faces, airports etc...

➤ While selecting the site for new institutions, factors like transport facilities, water supply, electric lighting, connections with high power electric transmission lines, drainage and sewage, communication facilities have to be taken into consideration.

➤ The architecture of institutions will be governed by two principles viz.

- (a) adequate protection to society through the establishment of security conditions;
 - (b) adequate resources which would be necessary for the successful implementation of various correctional programmes.
- Institutional design and architecture have to be functional.

➤ The plan of an institution will be based on a careful analysis of inmate population, age group, custodial, requirement, diversified work, educational programmes.

➤ Closed prisons are classified into three categories that is central prisons, district prisons and sub- prisons. Authorized population for these prisons will not exceed 1000, 500 and 300 prisoners.

- There will be enough open space inside the perimeter wall to allow proper ventilation and sunlight. No building inside a prison will be nearer than 50 mtrs to the perimeter wall.
- Under-trials and detenues will be lodged in separate institutions away from convicted prisoners. Accommodation for prisoners will provide adequate cubic contents of air, floor space, lighting, ventilation and climatic protection.

Housing:

All accommodation provided for use of prisoners, particularly for sleeping, will meet basic requirements of healthy living. Due regard shall be paid to climatic conditions, cubic contents of air, minimum floor space, lighting and ventilation.

There will be three types of living accommodations as mentioned below:

- (i) Barracks with accommodation for not more than 20 prisoners
- (ii) Single room accommodation for prisoners needing privacy for pursuing studies, etc.
- (iii) Cells for segregation of prisoners for the purpose of security and contagious diseases

Latrines:

Each barrack used for sleeping will have sufficient number of attached WCs, urinals and wash places. The ratio of such WCs will be one unit per 10 prisoners. The ratio of the WCs which can be used during day time will be one unit per six prisoners.

Latrines will be of the sanitary type with arrangements for flushing. They will be placed on an impermeable base which will be higher than the surrounding ground and will be so built that the sun's rays can easily enter the latrines and rain is kept out.

The partitions separating the latrines will be high enough to provide a reasonable degree of privacy. Latrines will be so designed that all excreta and wash materials will get into the receptacles without fouling the sites.

Bathing places:

Every prison will provide covered cubicles for bathing, at the rate of one for every 10 prisoner, with proper arrangements to ensure privacy. Every prisoner will be required to have bath as frequently as necessary for general hygiene. Taking into consideration that the daily requirement of water of an individual is about 135 ltrs., there will be an arrangement for the adequate supply of water.

If feasible, new prisons will have arrangements for rainwater harvesting and recycling of water, keeping in view its cost effectiveness.

Kitchen:

The general kitchen will ordinarily be located at a central place inside the prison so that the distribution of food among the prisoners may be finished quickly.

The kitchen will not be built close to the sleeping barracks. It will be well ventilated and lighted. It must always be kept clean and tidy. The oven will be of the type in which the heat does not escape outside and the smoke is let out by a suitable chimney regardless of the type of fuel used.

The kitchen will be protected by a fly proof wire mesh all around. Sufficient number of exhaust fans will be installed and artificial ventilation may be provided if necessary.

The kitchen must be provided with fly-proof automatic closing doors. It will have floors made of an impermeable material. Each kitchen shed will be provided with adequate supply of pure water which will be used for both cooking and washing. The water will be collected from taps inside the kitchen.

Worksheds:

Areas where prisoners work will have a minimum space of 500 cubic feet per prisoner in structures that will be constructed as workshops or factory buildings; for efficient ventilation the window area will not be less than 20% of the floor area subject to such

variations as are found necessary in relation to particular industries or locations to be organized.

Recreational facilities:

Proper recreational facilities like, grounds for outdoor games, auditorium for cultural activities, library, indoor games, yoga, etc.

THE SITE:

The size and location of the site greatly influences the design of the prison. Size needs are a function of the ground level area of the building (including area for non-jail functions) and area needed for expansion, parking, building access, outdoor activities, landscaping buffers, and support elements such as outdoor equipment. In rural sites, non-building elements may comprise 80% of the site area. The jail should be designed with awareness of relationship or proximity needs to:

Proximity to the courts:

Maintaining efficient and secure movement of inmates between the jail and the courts may be the single most critical linkage. On the other hand, if inmates must be transported between the jail and the courts,

a few blocks or a few miles makes little difference, since most of the transfer time is taken up with readying the inmate, loading, unloading, and re-admitting the inmate, rather than with driving.

Services:

It is desirable for the jail to be convenient to lawyers, a health care center, educational resources, volunteers, employees' homes, and community groups (such as Alcoholics Anonymous). Additionally,

proximity to emergency resources such as the fire department and medical emergency facilities is

important.

Transportation:

The jail should be easily accessible to all staff working in the facility as well as to visitors and others. If there is a public transport system in the area, the jail should be close to it.

SURROUNDINGS:

It is important that the jail be located in appropriate surroundings. If it is in the right type of area, conflicts with different types of functions will be avoided. The best locations are in government, light industrial, or commercial areas. In general, the jail should not be near a school, a housing area, a church, or a recreation area.

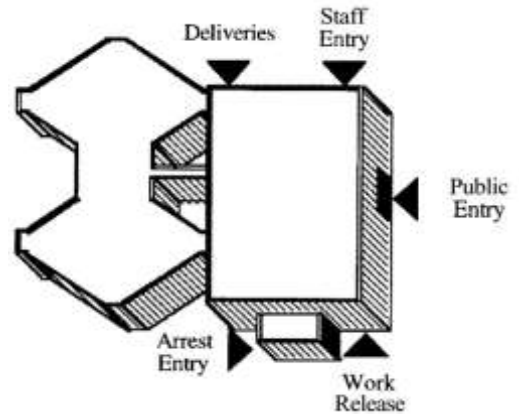
ACCESS TO THE SITE:

Vehicle driveways and pedestrian walks required for building access and services take land area. The principal forms of access for which area must be provided include:

- Arrestee delivery and transport
- Frequently in association with a secure vehicle rally port and a secure pedestrian entry
- Food service delivery, which may involve semi-trailer trucks; supply delivery
- Staff (affiliated with parking); public official visitors (affiliated with parking)
- Inmates, staff, or visitors with disabilities (affiliated with parking)
- Work release periodic inmates, when they enter and exit at a point different from most inmates for security reasons
- Garbage removal
- Emergencies, including medical and fire
- Mechanical repair equipment replacement
- Officials from other agencies, such as law enforcement

VIEWS AND CONTACT:

Controlling views and contact between inmates and people of surrounding areas is an important consideration in site selection and design. There are several typical problems.



Outdoor exercise areas:

The tendency to create an inexpensive, ground level exercise area that can double as an outdoor emergency refuge area can, especially in downtown areas, create sight, sound, and physical contact problems, especially escape and contraband passage through, under, or over fences.

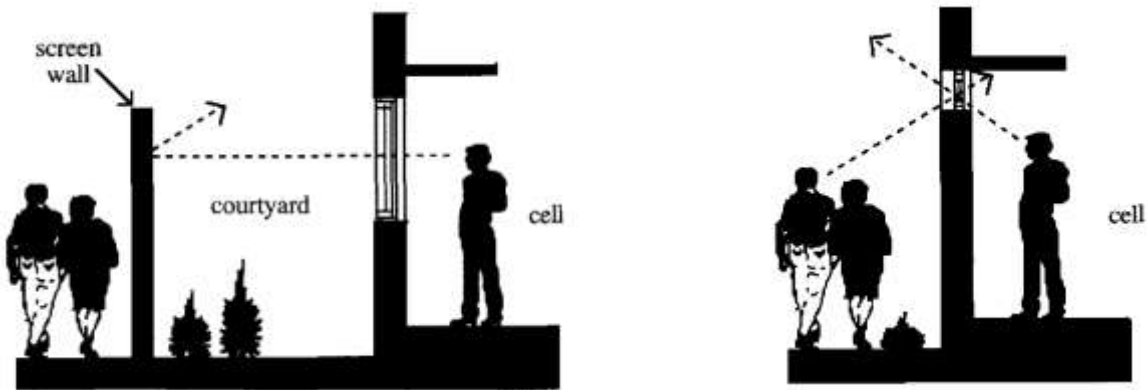
To help resolve this, the use of solid walls, protective screens over the exercise area, and careful

placement within the floor plan can be effective.

View conflicts from inmate-occupied areas:

View conflicts can result, especially in downtown areas, with the use of windows to provide required or desired natural light in inmate-occupied areas. This is most acutely the case with cell windows on the ground level, although view conflicts from program areas (like multi-purpose rooms) can also occur.

- Some responses to the problem include:
- Creating a heavily landscaped visual buffer, recognizing that trees and shrubs take time to grow.
- Creating window sill heights well above floor levels.
- Using tinted or reflective glass in windows, with night lighting on the exterior of the building to limit exterior-to-interior visibility while preserving inmate view and to discourage outside approaches to the building.
- Using translucent glazing in windows to provide natural light only (if allowed by local standards and codes).
- Using inaccessible skylights or clerestory windows to provide natural light and, possibly, a view of the sky only.
- Clerestory lighting, in particular, has to be studied because views may unintentionally be created between the inmate areas and the upper portions of an adjacent mid-rise building.

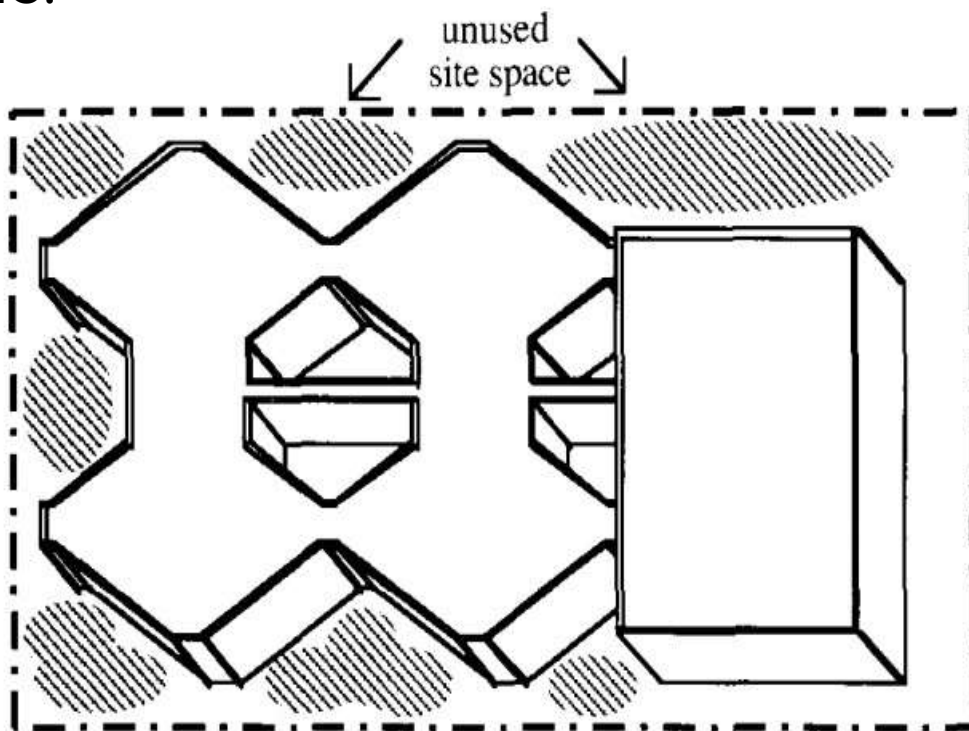


BUILDING AREA:

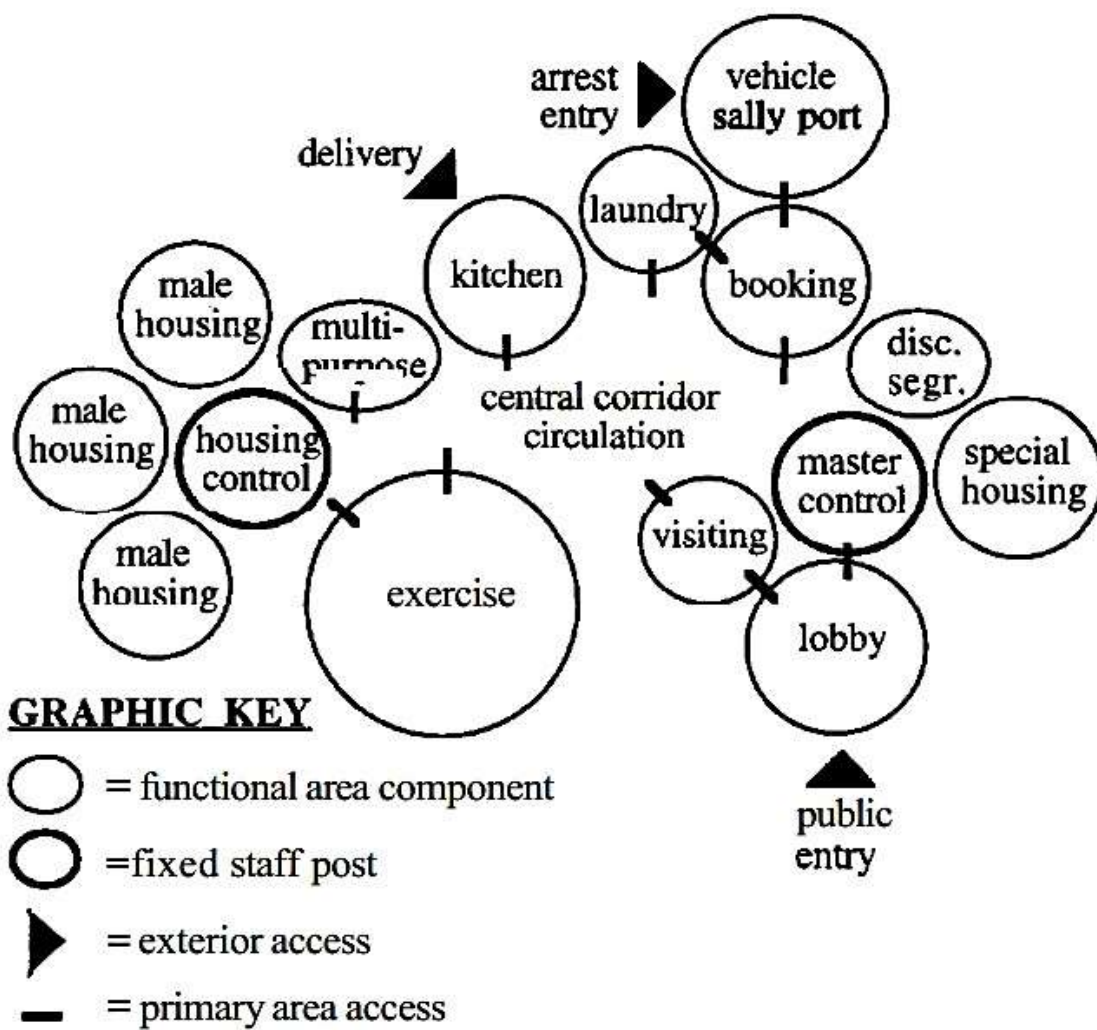
Considering site possibilities, it is important for the client to appreciate how much larger a new jail will be when compared to the existing jail.

This is typically due to several key factors besides the increase in bed capacity: increased per bed square footage requirements in housing areas; increased provision of program and support areas; and oversized support and program areas to accommodate future bed capacity expansion. However, for the following reasons, ground area is rarely the same as the total square footage documented in the space program developed during pre-design planning.

PLANNING:



Irregular shapes -- To achieve interior efficiency, many jails have irregular shapes (non-square or non-rectangular, for example) that create unusable spaces between portions of the building.



Typical jail relationship bubble diagram

FUTURE EXPANSION:

Many new jails are designed without consideration of future capacity expansion. With the many changes that have occurred and can occur with criminal justice philosophy, state law, and arrest rates, expansion planning must be part of any facility development process.

In the absence of specific expansion plans, providing twice the area of the jail for expansion needs would not be unreasonable.

PARKING:

The parking needs of a jail facility can be considerable and, at approximately 350 to 400 square feet per car, can represent a significant on site requirement.

Staff :

One car per employee on the largest two shifts combined to allow adequate parking at shift change.

Family/personal visitors :

Two cars for the maximum number of visitors allowed at one time to allow enough parking for both the persons visiting and the persons coming to visit during the next time period. For example:

Maximum visitors = 8 8

visitors visiting

8 visitors waiting to visit

16 total visitors requiring parking

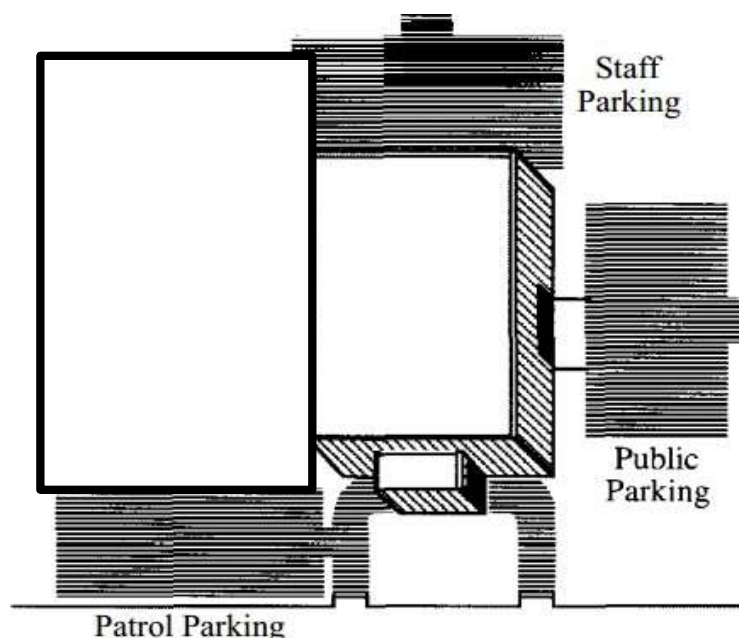
Others :

Spaces as appropriate for:

- Arresting officers from city
- Outside service providers (doctors, nurses, counselors, volunteers)
- Official vehicles, such as transport vans
- Business/official visitors (lawyers, bondspersons, sales representatives, law enforcement officials)

Multiple parking areas :

A primary advantage with multiple areas is that secured parking can be provided for staff cars and official vehicles that are sometimes subject to vandalism. Additionally, separate areas tend to better recognize an official, professional status, particularly if select parking stalls are protected from the elements (such as shed-like covered areas).



OUTDOOR SPACES:

Exercise area:

Walled, fenced, or unenclosed, depending on the security level of inmates.

Emergency egress / refuge area:

A controlled outdoor area to which inmates can be temporarily evacuated in an emergency. This may be the same as the exercise area, if part of it is far enough from the main building.

Visiting area:

For minimum-security inmates, perhaps with a picnic table.

Farm or garden area:

If the facility grows some of its own food or has an inmate training program.

General landscaping area:

For aesthetic purposes and the creation of buffers between the building and the public.

Ground space may be needed for:

- Radio antennas
- Gas tanks and pumps
- Utilities (transformers, sewage treatment, etc.)
- Water retention areas (in locations where onsite Management of water run-off from heavy rainstorms is a concern),
- Garbage dumpster/compactor
- Special law enforcement needs (impound yard or building, vehicle service bay, etc.)

CLASSIFICATION OR SEPARATION OF THE INMATES:

Physically separating categories of inmates from each other remains a major design and operational problem for all jails, particularly the small jail. It is perhaps the problem that most distinguishes a small jail from a large jail.

Housing units comprise about half of a jail's square footage and the primary security areas of the jail. Consequently, an issue like classification and housing area separation has a fundamental influence on basic design arrangements.

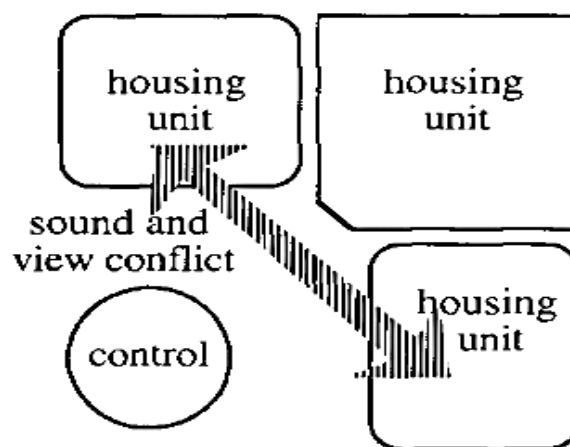
Basis of classification/ separation:

Examples of the characteristics of inmates in both large and small jails include:

- Male, Female
- Adult, Juvenile
- Prior arrest and/or conviction history
- Short and long term stays
- Arrest for violent offense
- Intoxicated
- Psychological or mental problems
- Sexual predators
- Under medical treatment

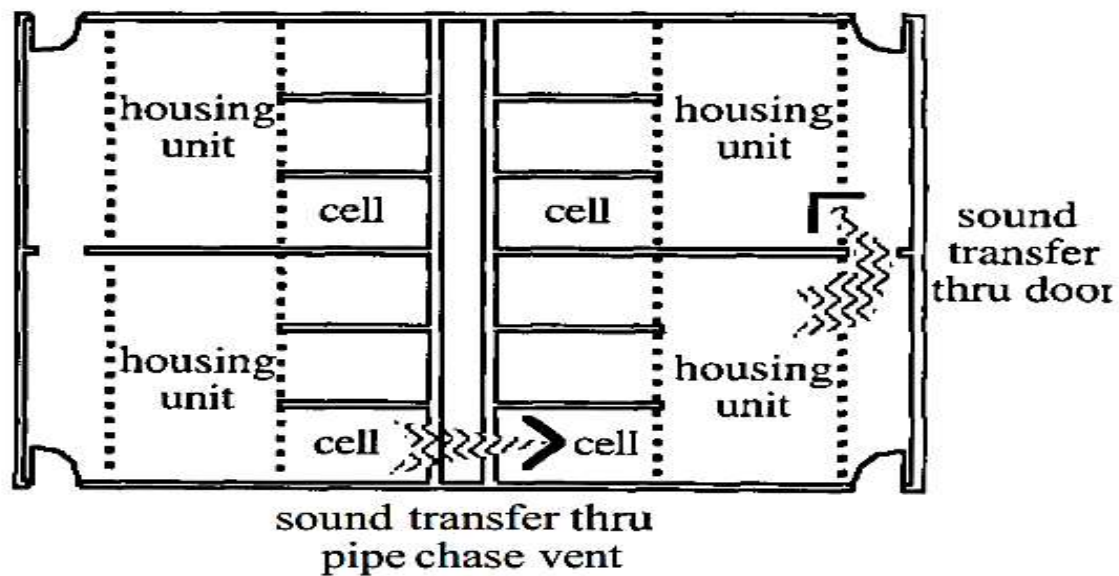
SURVEILLANCE METHODS:

Remote surveillance designs, in which a series of housing units is clustered around a fixed control position, pose the greatest challenge since visual and perhaps acoustic conflicts can occur between individual housing units as a by-product of the clustering design.



The success of direct supervision over the past ten years has caused to eliminate or minimize the traditional linear jail design with its reliance on intermittent surveillance. While physical inmate separation can be more easily attained with facilities designed for traditional intermittent surveillance, since the location and size of housing units are not closely tied to the location of a staff post, there are too many other operational drawbacks with this approach.

While intermittent surveillance has the benefit of easily allowing many separate cellblocks, in reality visual and acoustic separation capabilities are lost through housing units located across from each other, back-to-back with each other, or next to each other in one common cellblock area.

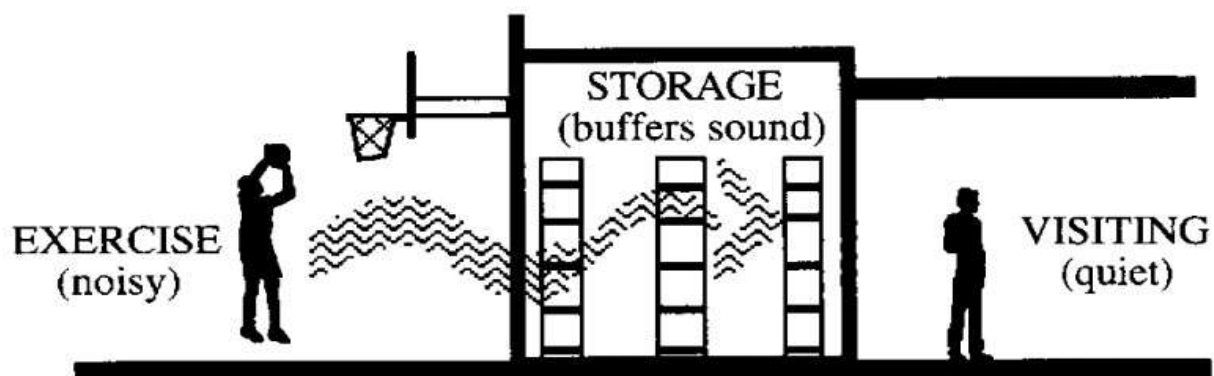


Many impenitent designs use steel bars on cell and dayroom fronts, thereby sacrificing sound and, in some cases, sight and physical separation capabilities. Separation tends not to be a problem with direct-supervision operations since the units can operate in an essentially self-contained manner, thereby eliminating the need to affiliate them with control positions outside the unit or to expose them to full views from corridors.

Cell occupancy:

Most older jails have most of their capacity in multiple-occupancy cells and dormitories that often compromise classification and physical separation decisions, especially when cells with four or more beds predominated. In such a jail, when an inmate requires special housing, he / she effectively occupies four beds rather than one.

Further, proper separation still cannot be achieved since the "special housing" cell is part of an entire cellblock from which sight and sound separation cannot be achieved. The traditional bar grill cell-front design only worsens this problem since not even physical separation can be fully achieved.



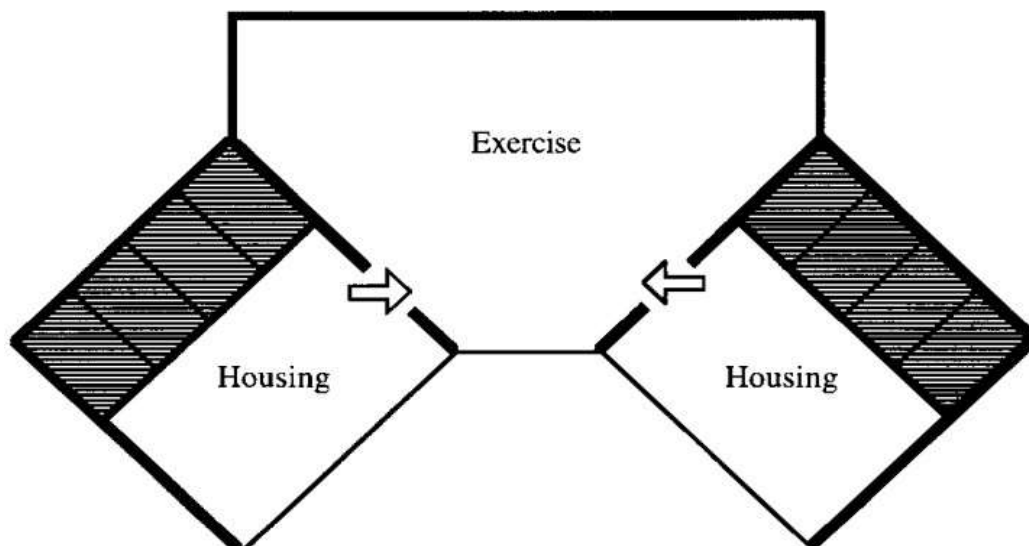
Sound separation:

Sound can also be transmitted through ceiling plenums, duct work, and electrical outlets placed back-to-back between two areas. Consequently, a close review of these details is required to preclude unwanted sound transmission.

Movement separation:

Separation during times of movement must be considered. One way to clearly separate sight and sound contact during movement is to identify the basic degrees of separation desired in housing, to create appropriate clusters of housing accordingly, and to locate key program and service areas between those clusters.

Such positioning enables inmates from the various clusters to move to the program and service areas without having to directly pass the housing units of the classifications from which they must be totally separated.

**SURVEILLANCE METHOD:**

Each of the basic surveillance/supervision methods has a very large effect on the ability to attain proper sight, sound, and physical separation between various inmate categories.

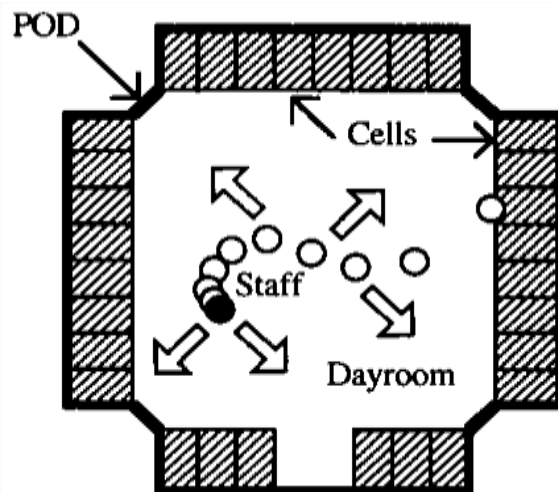
Direct Supervision:

The direct-supervision method is a very effective approach for managing the behavior of inmates. Direct supervision allows staff to be in total control of all spaces and activities within the jail.

Inmates are under constant staff supervision. Its principal effects on classification are both positive and potentially negative in the jail. In positive terms, direct supervision allows for the merging of some populations that might not otherwise be housed together.

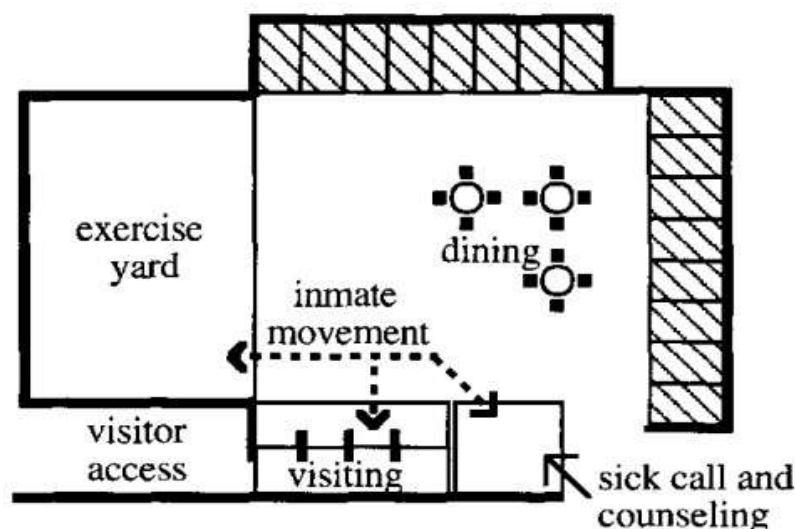
For example, there would seem to be little or no need to create a "medium" security group and to separate it from a "minimum" security group. In addition, with direct supervision, there is less concern about slight variations in the makeup of the population as it changes over time.

One possibly negative impact is a tendency to over-staff the jail by placing staff in pods with relatively small capacities simply to achieve both direct supervision and separation of certain inmate groups for management purposes.



Movement:

Although movement within the housing unit is not an issue, moving out of the unit to programs and services is. By the very nature of the direct-supervision concept, the housing unit officer is confined to the housing unit and cannot perform duties outside of the unit. Consequently, a key idea behind direct supervision is to focus as many activities and programs within, or adjacent to, the housing unit as possible with minimal staffing. This can be done with all essential daily functions, such as dining, exercise, sick call, counseling, and visiting.



Furniture and equipment:

One of the benefits of the direct-supervision concept is that the security features and construction of the facility can be lessened and normalized because of greater staff control. This reduces initial construction costs. The following selections have been made in some direct supervision housing units:

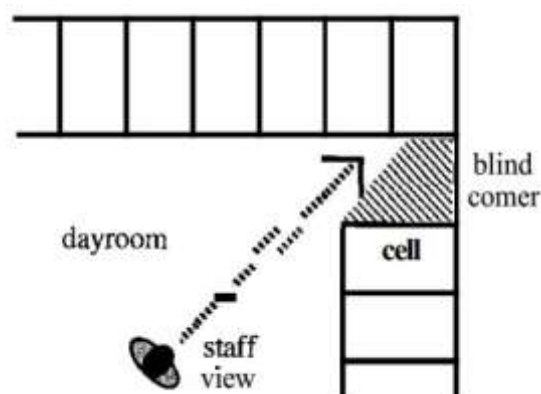
- Non-fixed, non-security dayroom furnishings
- Non-fixed, non-security stools and desks in cells
- Low-security locks and hardware on cell doors
- Lighter gauge hollow metal doors on cells (gauge mainly decided by durability considerations)
- Carpeted floor surfaces
- More lightly constructed and reinforced partitions
- Non-security vitreous china toilet and sink fixtures

Staff impact on design:

- Direct-supervision monitoring of programs and services is not uncommon in jails. Control booths or observation counters are not needed outside of program and services areas. However, the officer in these situations should be backed up by:
 - Direct surveillance from a control post or by electronic supplements such as panic buttons
 - Voice-activated intercoms in walls or ceilings
- Personal radio alarm systems
- CCTV monitoring of program areas
- Care must be taken that direct supervision is not relied on in areas that require privacy (e.g., attorney/client visiting, private counseling)

View:

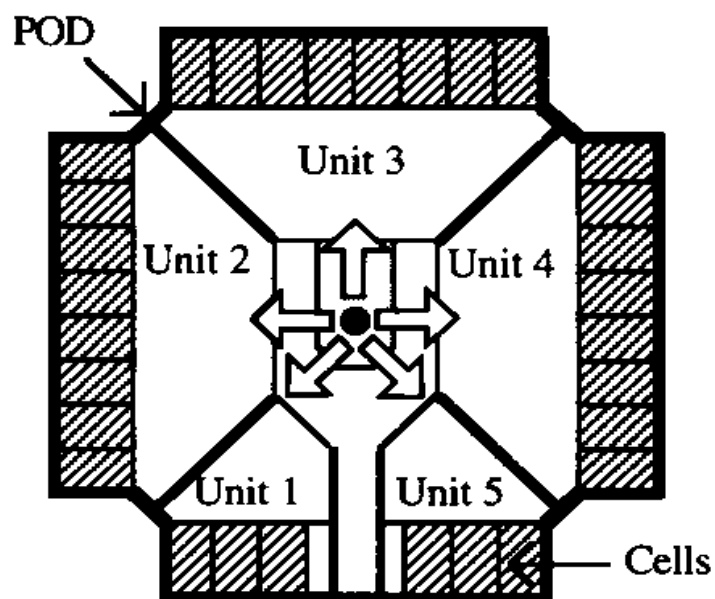
- Although the officer is positioned within the housing unit or program area, it is still wise to provide a good view of the entire area being supervised. "Blind corners" and out-of-the-way pockets of space are problematic to direct-supervision officers and are a threat to inmate safety.



Intermittent Surveillance:

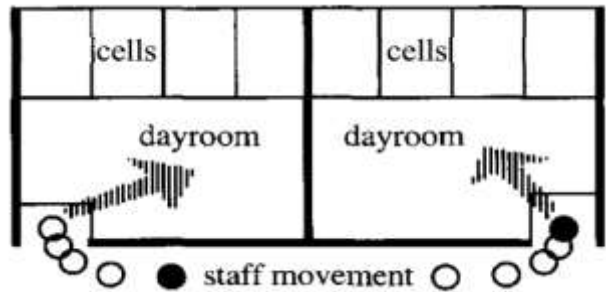
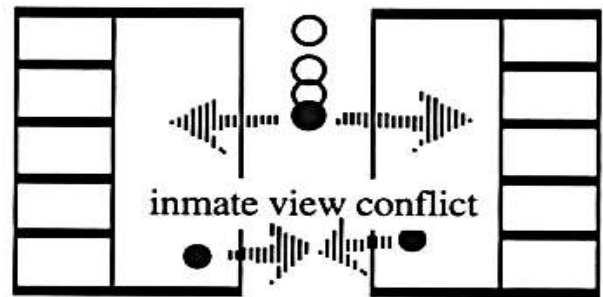
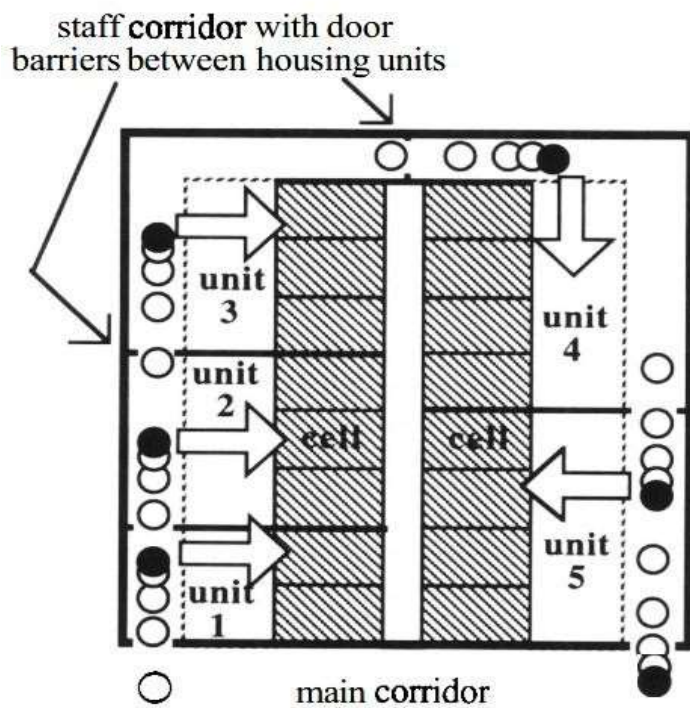
Intermittent surveillance approaches don't assume that staff will observe housing units constantly, thus placing no special requirements on grouping the various units around a constantly staffed post. Therefore, housing clusters can be dispersed for physical, sight or sound separation. However, intermittently monitored facilities tend to have greater operational problems in areas of assaults, suicides, escape attempts and damage.

Consequently, if this approach is adopted in lieu of a constant method of surveillance or supervision, it is recommended that a more discriminating job of separating inmates be done. This would ensure that the density of each housing area is minimal and that security or management risks are more clearly separated by physical means, rather than by dependence on constant staff intervention, even though it cannot fully compensate for a lack of staff presence. Additionally, more emphasis should be placed on the use of higher security construction.



Movement:

One of the key concepts that shape the organization of spaces in an intermittently monitored area is the efficiency of officer movement in making rounds. While the design benefit of the intermittent surveillance concept (particularly as it refers to housing units) is that there is much more latitude in the placement of spaces, totally random and loosely developed concepts of arrangement can make for very awkward and difficult movement patterns for the officers.



Furniture and equipment:

Since the housing areas monitored by intermittent surveillance leave inmates unsupervised for the majority of time, the need for vandal-resistant furnishings, fixtures, finishes, and hardware becomes critical.

Staff impact on design:

2 staff members are required for intermittently monitors housing units since one officer must be available to back up the officer who enters the cellblock.

Since no fixed control post monitors the area, both officers are roving staff, one officer controls the cellblock from outside while the other is within the cellblock.

View:

While intermittent surveillance allows the relatively random dispersal of housing units and program spaces, designing for efficient movement creates the prospect of view conflicts.

For example, a view conflict may exist because two housing units are placed across from each other roving staff with good view off a main corridor to facilitate staff movement and observation. The conflict may become acute if the entire faces of the dayrooms are glazed to allow the intermittently roving staff a good view.

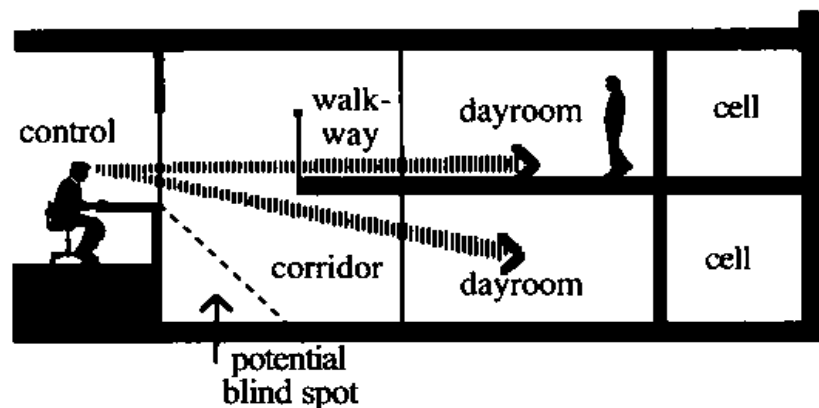
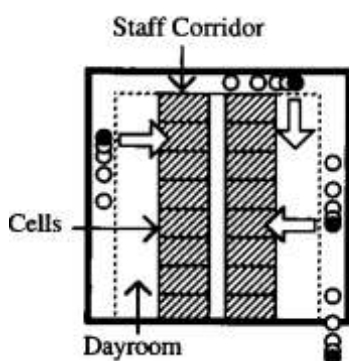
Remote surveillance:

In designing for remote surveillance, the following special concepts should be implemented to mitigate sight and sound separation problems:

- Create separate housing clusters for groups that require complete separation. For example, all male clusters could be developed separate from all female clusters.
- Control sound through the use of solid construction consisting of security glass and concrete block or concrete wall elements instead of bar or grill cellblock faces.
- Not only do fire codes typically demand that the dayroom faces be solid, but required acoustic and physical separation also demand that they be solid.
- Walls should extend past ceilings and above roof construction, and / or ceilings should be secure and resistant to sound transmission through ceiling plenums.
- Control views by the manipulation of dayroom faces, dividing walls, and the use of other barriers such as intervening corridor doors.
- Use reflective glass surfaces in the control position to eliminate views through the control center to other housing units.
- Some administrators feel that the inability of inmates to see the officer through such obscured glazing has a positive behavioral influence in that inmates never know when the officer is watching them. Such an approach is not without problems.
- Reflective glass can limit the control officer's view by creating darker, more reflective surfaces through which to look. This problem is complicated when light levels are higher in the control center than in areas being viewed. This approach also tends to de-personalize the jail environment by hindering inmate officer interaction.

Movement:

The remote surveillance approach to monitoring movement requires placing fixed staff posts in a position to look down key corridors. Preferably, designs will feature the ability not only to monitor corridors but to maintain direct visual contact with other control positions within the jail.



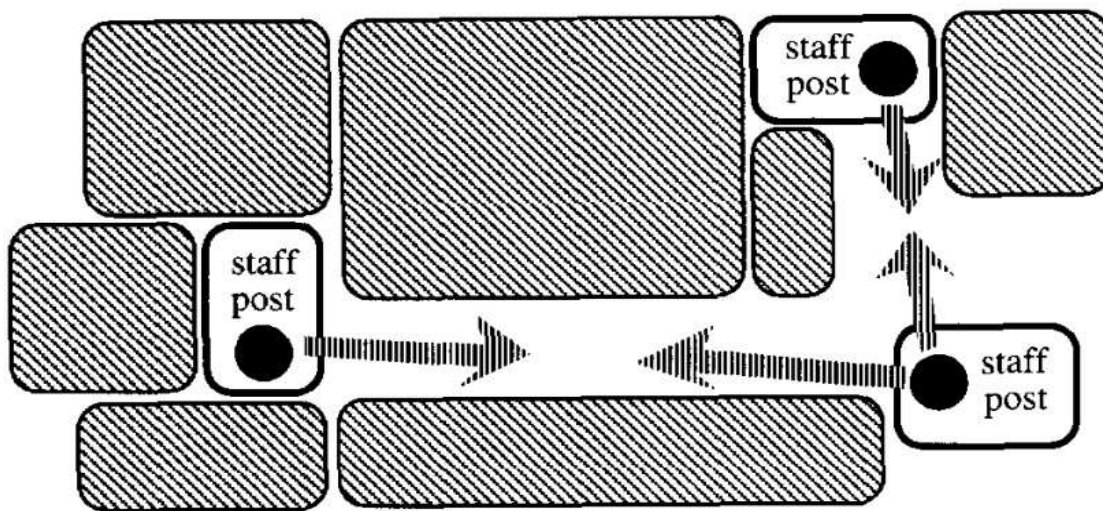
Section showing control room overlooking the cell and dayroom areas

Furniture and equipment:

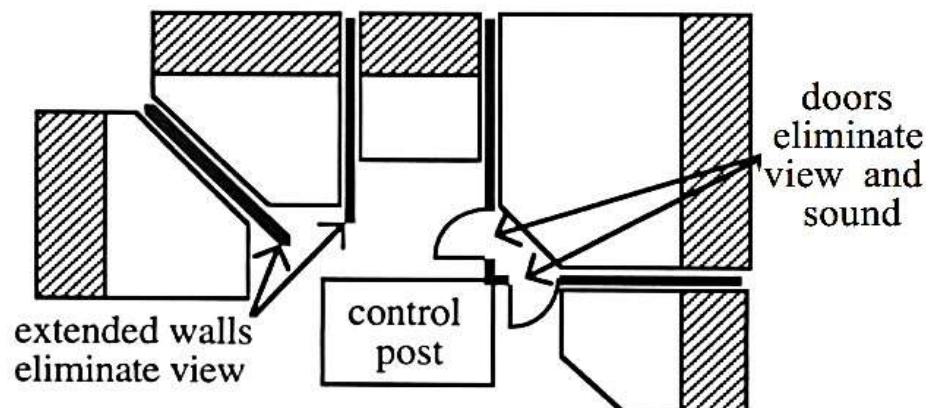
With the constant presence offered by remote surveillance, designers have felt that in selected housing units less costly, non-fixed institutional furnishings can be used in place of fixed detention furnishings and that locks and hardware of a lower security nature can be used. Additionally, a lesser need for electronic surveillance, particularly CCTV, has been perceived in remote surveillance housing settings. However, the security envelope of the building cannot be compromised and must be maintained with high-security construction.

Views:

The greatest challenge in developing the remote surveillance concept in housing is to provide officers with a full view of all areas they are expected to observe from a fixed post while avoiding view conflicts between individual housing units associated with that post. The primary way to do this is to avoid mixing into one housing area groups that should be dispersed among different staff stations.



Frequently the attainment of minimum staffing requires that different groups be around the same control position. In the smallest of jails, the desire may be to do this around one fixed post. Several techniques can be used to try to achieve this without creating sight and sound conflicts.



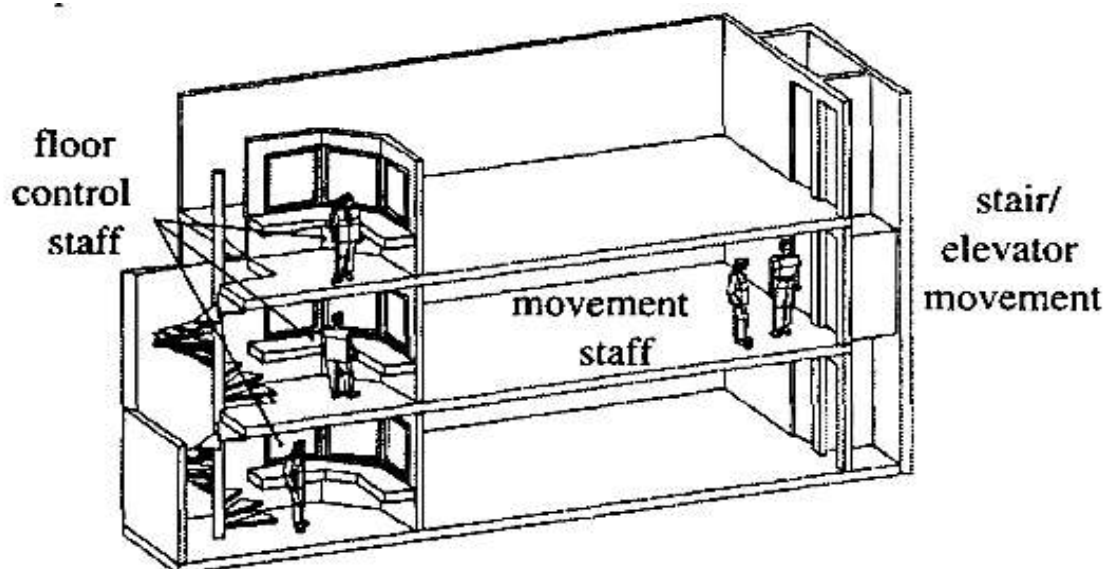
- Subdivide the corridor within the area to create visually and acoustically separate.
- Manipulate the location of dayroom side and front walls to preclude side-to-side view between units.
- Consider placing housing units one over the other to preclude side- to-side view.
- Consider using mirrored surfaces on the glazing of control center pods to preclude view through the pod and into another area.

SINGLE LEVEL VERSUS MULTIPLE LEVEL:

A multi-level design with just 10 to 15 beds on each floor can drive staffing costs to unaffordable levels. For example, if each floor requires a minimum of one 24-hour post, a 3-floor jail with a capacity of 45 beds could well require a minimum of 15 housing area security staff ($3 \text{ floors} \times 3 \text{ posts} \times 1.67 \text{ relief factor} = 15 \text{ staff}$) just to meet minimum standards in some states and to ensure safety and security. This does not include administrative staff, support staff, or any other security staff.

In addition, movement of people and services (food service and laundry, for example) can become more time consuming and complicated in a multi-level facility, particularly a small one with fewer staff. Required stairways and elevators present the jail staff with additional surveillance problems and security risks. Multiple levels also add to safety complications in terms of design and exiting. Also, the potential exists for increased maintenance problems and costs (elevator service, more potential for equipment failure, and more problems in managing operations when essential equipment fails).

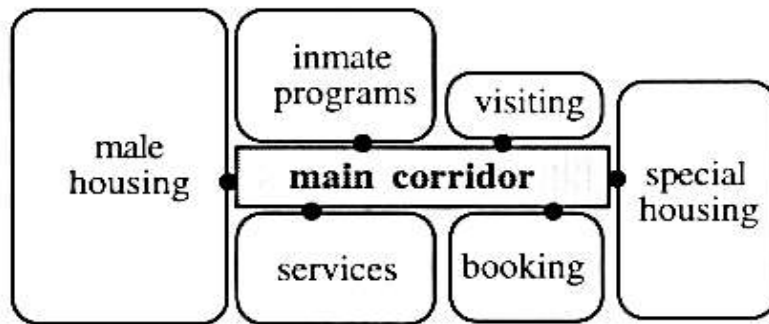
Multiple levels also eliminate the ability to create direct sight lines between staff posts and preclude any direct interrelationship between them unless an attempt is made at some sort of vertical connection such as a stairway.



CIRCULATION AND MOVEMENT:

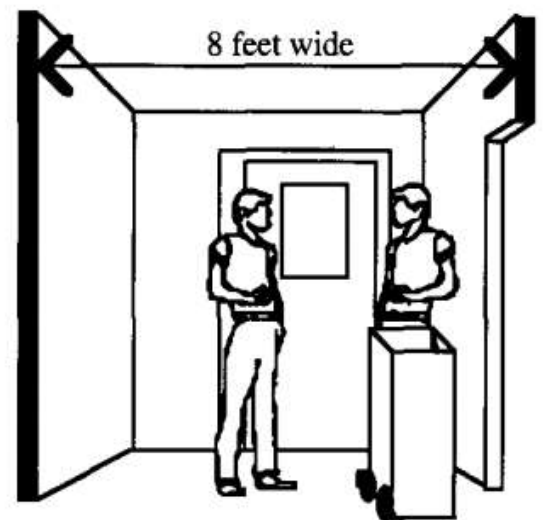
Simplicity:

Keep circulation corridor patterns simple and to the minimum number of levels possible. This makes movement more direct as well as easier to observe and supervise.



Functional relationships:

Arrange functional components according to their use and their users. For example, since inmates eat three times a day, a convenient location for food services that permits efficient delivery of food to the pods and the return of trays and refuse to the kitchen becomes important to staff. On the other hand, since the commissary is probably used once or twice a week, its location is less critical.

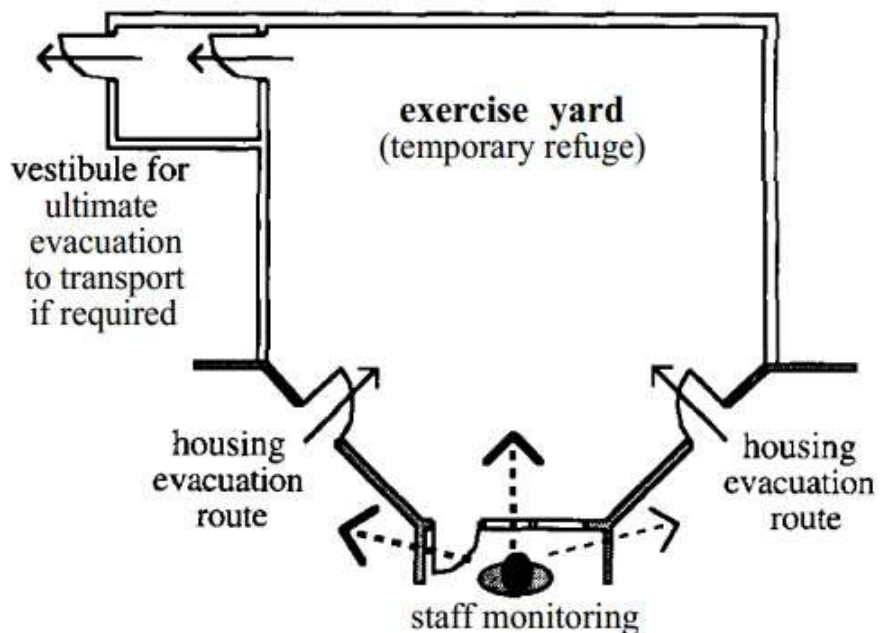


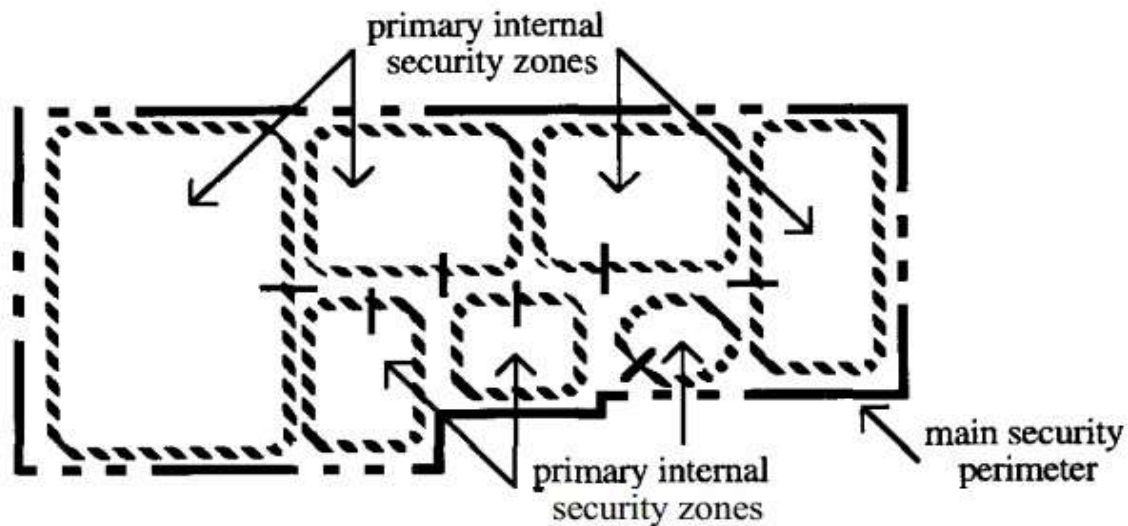
EMERGENCY RESPONSE:

A constant minimum level of staffing is required to accomplish three key activities during an emergency:

SECURITY PERIMETER:

Every jail should have a well-defined security perimeter with each point of entry controlled through a security vestibule (a set of two interlocked doors that can be opened in unison only in an emergency). All exterior windows and other potential means of egress from the security perimeter must be secure. The weaker the security perimeter, the more staff it will take to control and supervise inmate movement and housing.

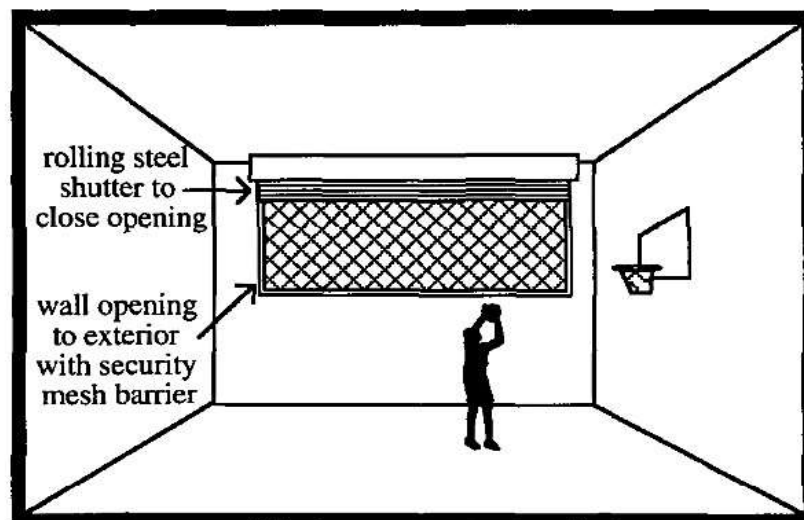




Indoor/ outdoor recreation:

Both indoor and outdoor recreation spaces accommodate the same activities, such as basketball, handball, and weight lifting.

The only difference is outdoor recreation is open to the outside natural light and fresh air. By creating the ability to close open air access to the outside, a recreation area can be used as both indoor and outdoor space.

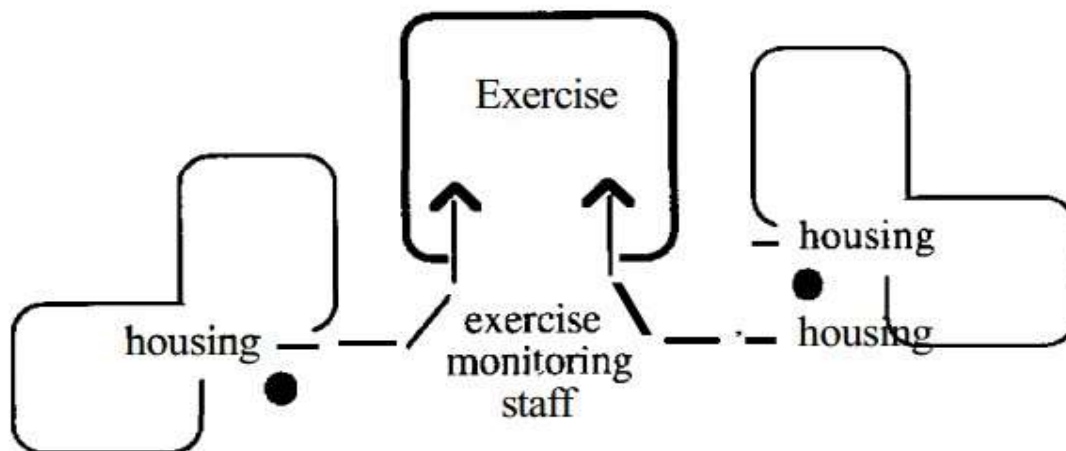


Architectural Compatibility Issues:

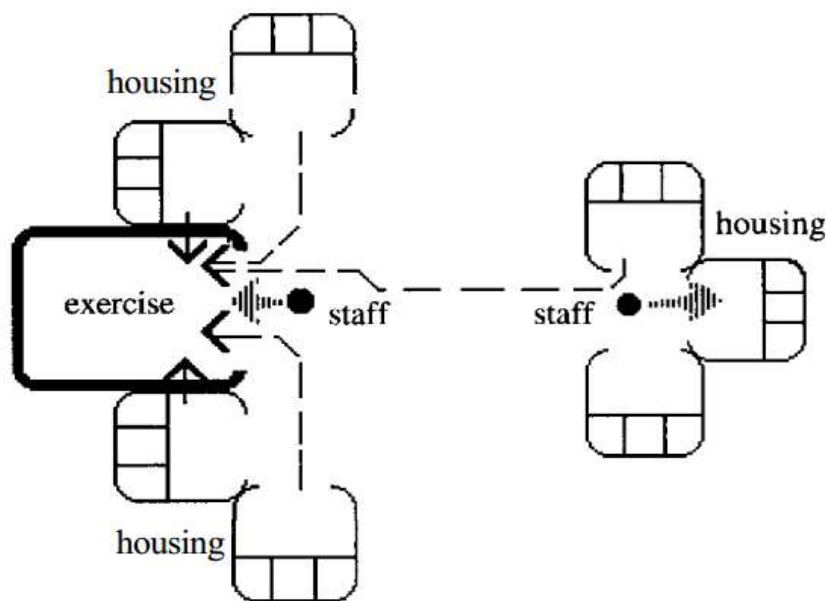
- Adequate size to accommodate basketball and exercise equipment
- Storage for recreational and exercise equipment
- Heating, cooling, and lighting when used as indoor exercise space
- High ceiling to allow for basketball
- Observable by staff
- Located in close proximity to inmate housing
- Sight and sound separation from housing areas to allow use by both males and females at different times

Movement and control:

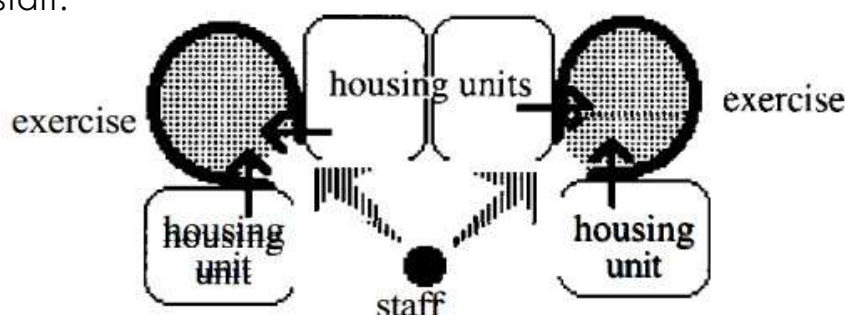
- Have one large central location to which all inmates are moved and subsequently monitored by special staff.



- Have inmates move to one large location monitored by a constantly staffed post that also monitors other areas such as housing (e.g., Master Control or housing control).



- Create exercise areas immediately adjacent to each housing unit or cluster to be monitored by a constantly staffed post that also monitors other areas such as housing, thus eliminating movement of inmates through corridors to exercise areas and maximizing use of a "fixed post staff."

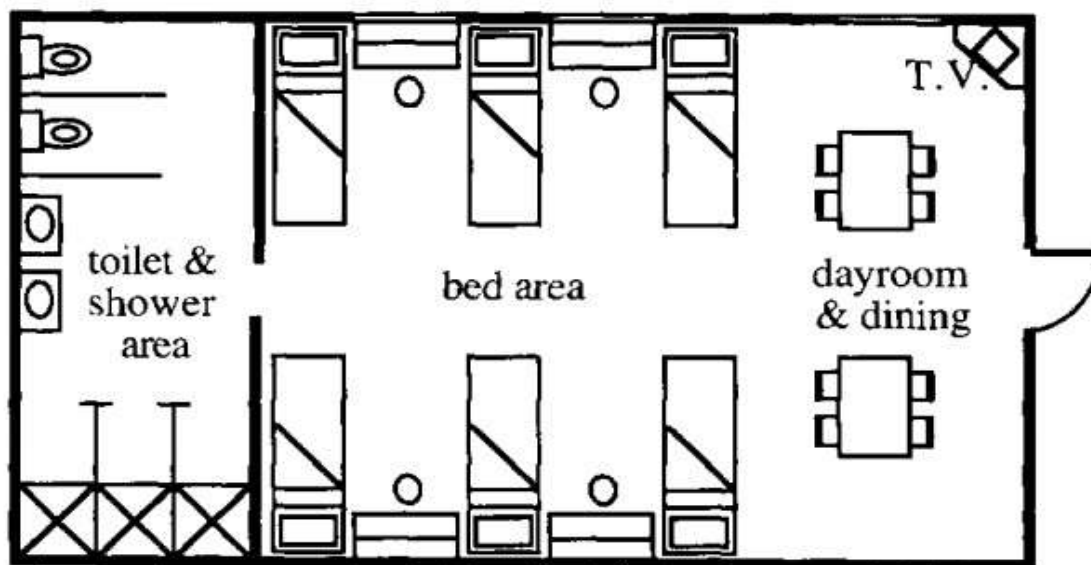


SINGLE OCCUPANCY CELL VERSUS MULTIPLE OCCUPANCY CELL:

An issue that frequently sparks debate within a community is whether to design inmate cells (sleeping rooms) with one bed (single occupancy) or with two or more beds (multiple occupancy). Local decisions in this regard have a considerable impact on the design of a jail, on project costs, and on the security and management of the jail.

Multiple occupancy:

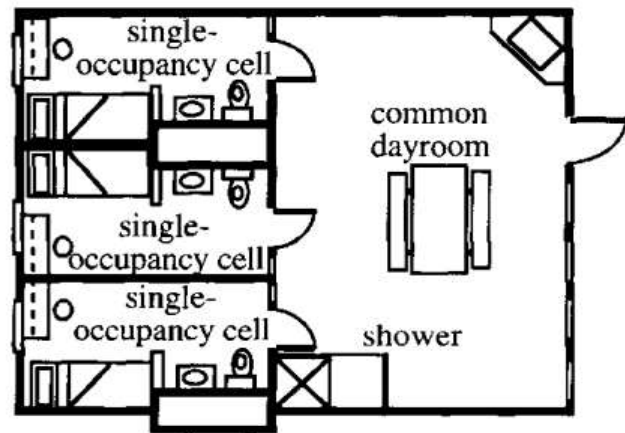
Multiple-occupancy sleeping rooms generally come in two types: cell style and dormitory style. The cell style multiple-occupancy room has historically included beds, a toilet, a sink, and perhaps a desk, stool, and shelf. It does not include such things as a shower or dining table, which are normally provided in adjacent or nearby dayroom spaces. Cell type multiple-occupancy spaces usually hold two to four inmates.



The dormitory style multiple-occupancy inmate space tends to be more self-contained. Everything needed to serve minimal inmate personal needs is within the single space: beds, toilet, sink, shower, dining table, and bench. Consequently, dayrooms are not typically associated with dormitory style cells. As many as 8 beds are frequently found in multiple-occupancy dormitories of smaller jails, and as many as 50 beds in those of large jails.

Single occupancy:

A single-occupancy cell normally has a bed, desk, stool, toilet, sink, and shelf at a minimum and shares an adjacent dayroom with other single-occupancy cells.



Two frequently cited operational concerns about the use of single occupancy are suicide and isolation. The isolation issue is easily resolved, however, with the provision of an adjacent dayroom serving a number of single-occupancy cells. Such a dayroom provides ample opportunity for contact between inmates. Suicide is a more difficult issue.

Many people feel that single-occupancy cells are more conducive to suicide attempts and that the presence of two or more inmates in a multiple-occupancy setting reduces the likelihood of suicides. However, beyond the question of whether inmates should be relied on to prevent suicide by their cellmates, the fact is that suicide has been a problem in jails for years and most jails have, historically, consisted mainly of multiple-occupancy cells or dormitories.

The primary way to control suicide is operational rather than physical:

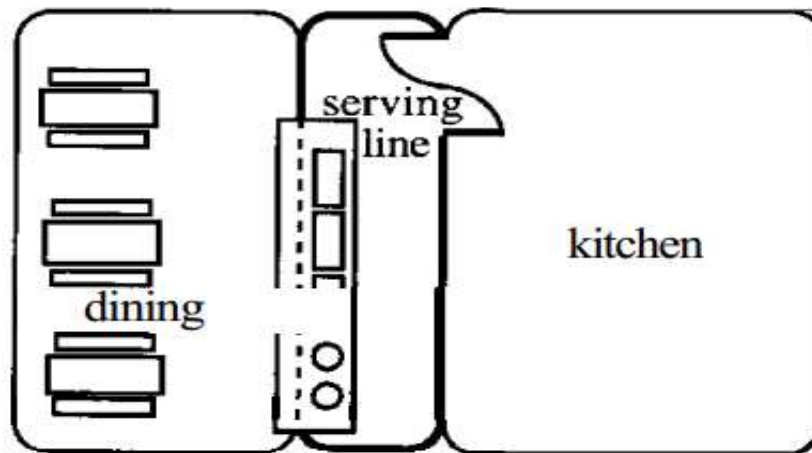
- Realizing that most attempts occur shortly after intake
- Taking steps to identify suicide risks (i.e., suicide screening at intake)
- Providing thorough staff training in recognizing signs and symptoms of suicide risk
- Providing adequate and frequent staff observation of suicidal inmates
- Arranging for needed services for troubled inmates

THE KITCHEN:

If food services are to be provided in-house, the primary operational concerns would focus on the potential use of inmate workers and, therefore, whether food service staff would have security responsibilities in addition to meal preparation and cleanup. Kitchen activities require cutlery and other equipment that could become weapons. Where inmate workers will assist in food preparation and cleanup, special precautions for food delivery, trash removal, inventory control, and the location of inmate worker housing must be considered.

Also, when inmate workers are used, there is the question of whether food service staff must be trained for supervising inmates or if intermittent or electronic monitoring by other jail staff is required. Other tasks associated with food services include menu planning, food purchasing, and maintaining food service records. The design considerations for these tasks are discussed in the functional issues to follow.

Centralized dining:



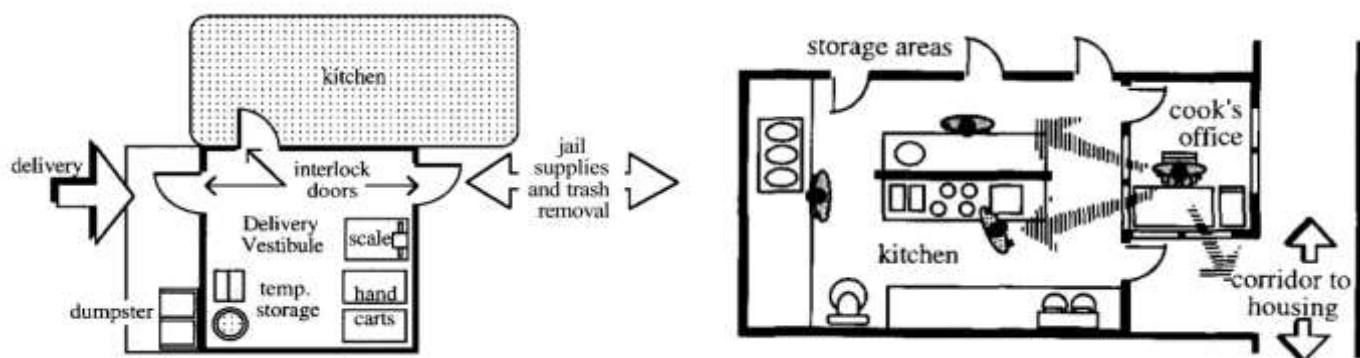
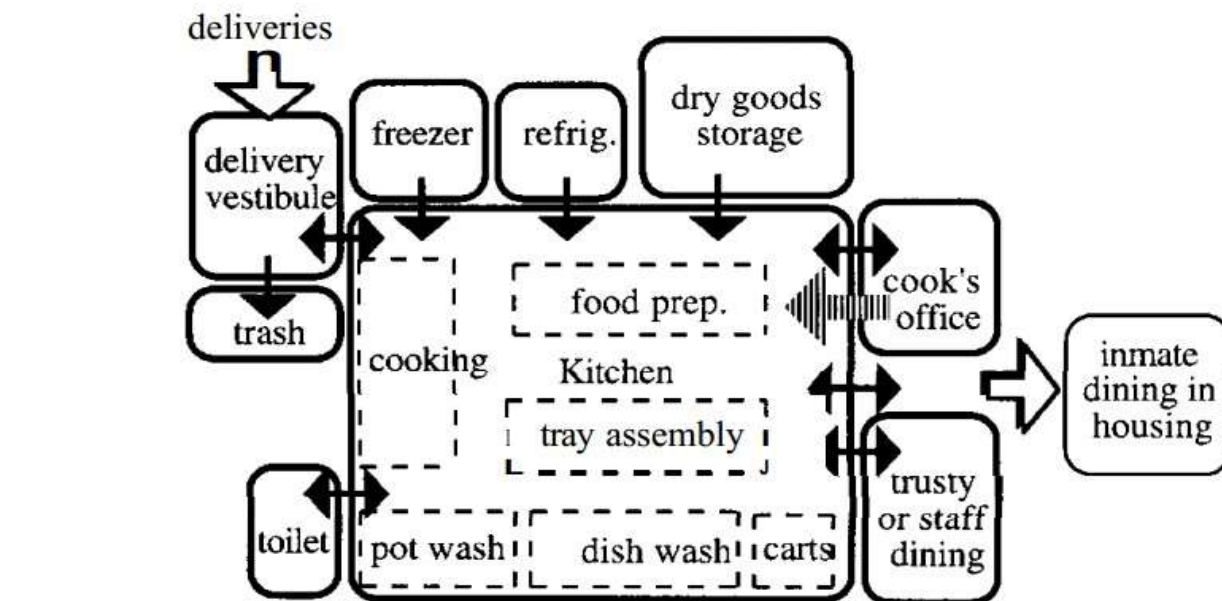
A centralized dining area has the potential advantage of using a serving line and dining space adjacent to the kitchen. This location eliminates the need for tray assembly time and food carts, provides the quickest delivery of hot foods, and simplifies cleanup.

Decentralized dining:

Two classic problems with dining at the housing units have been

- 1) insufficient space for rapidly and effectively distributing meals, including drinks,
- 2) maintaining proper food temperature.

As an example, bulk food containers are set up in each housing unit or general housing area for final traying, in some cases employing a cafeteria-style serving line. In some instances, microwave heating units located in each housing unit or in the general housing area are used to re-heat entrees to an optimal temperature. These food service methods usually require direct staff supervision and are rarely attempted in smaller jails because of the modest capacity of each housing unit, the intensive use of staff time required to facilitate serving, and the minimal travel distances (and thus cooling time) involved with a small or medium-sized jail, particularly when it is a single level.



SERVICES:

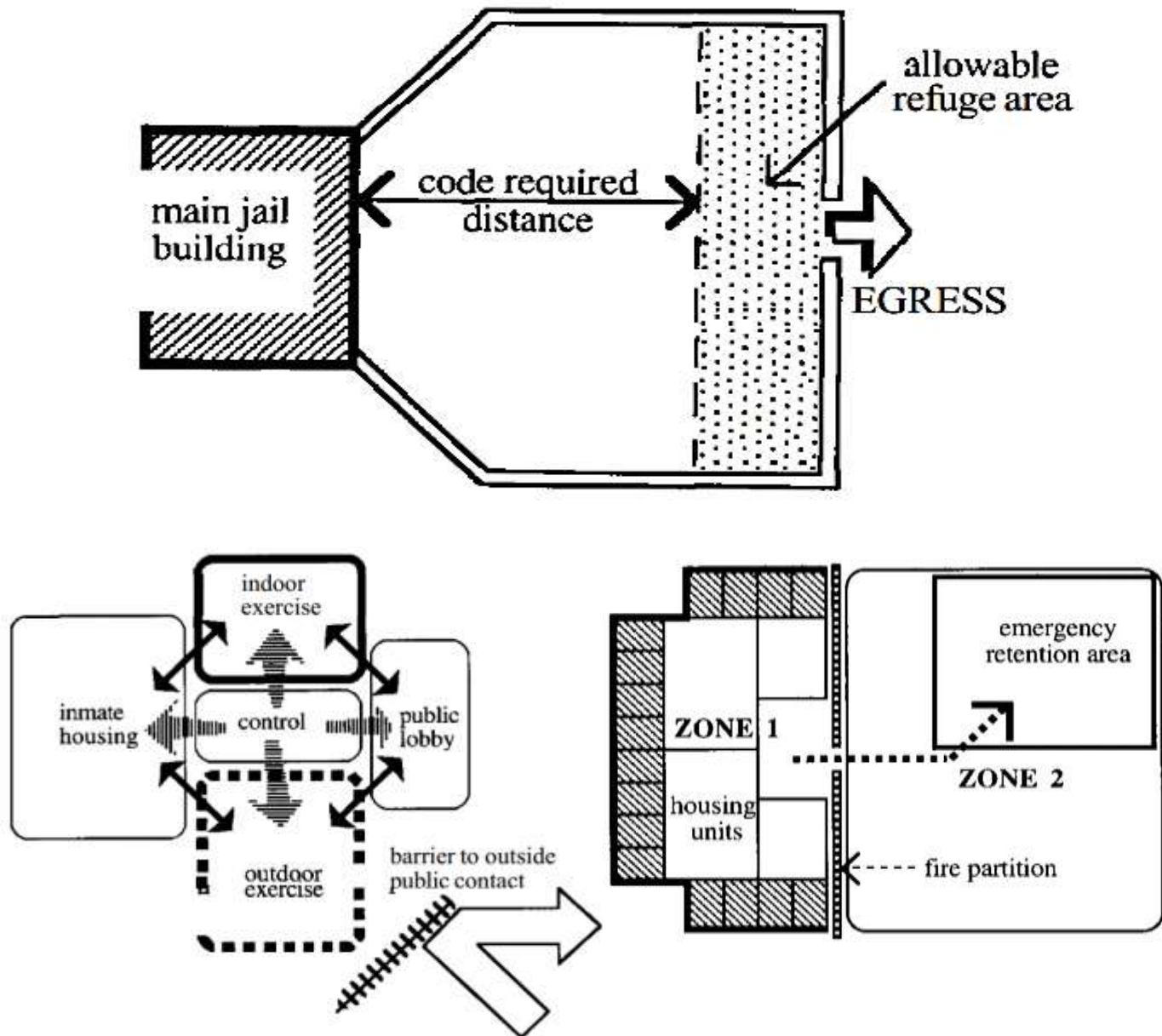
Fire safety:

All jail administrators face the problem of controlling inmates during emergency evacuations.

In many cases, emergency evacuation needs are limited and can be handled by moving inmates from one fire-protected zone of the building to another.

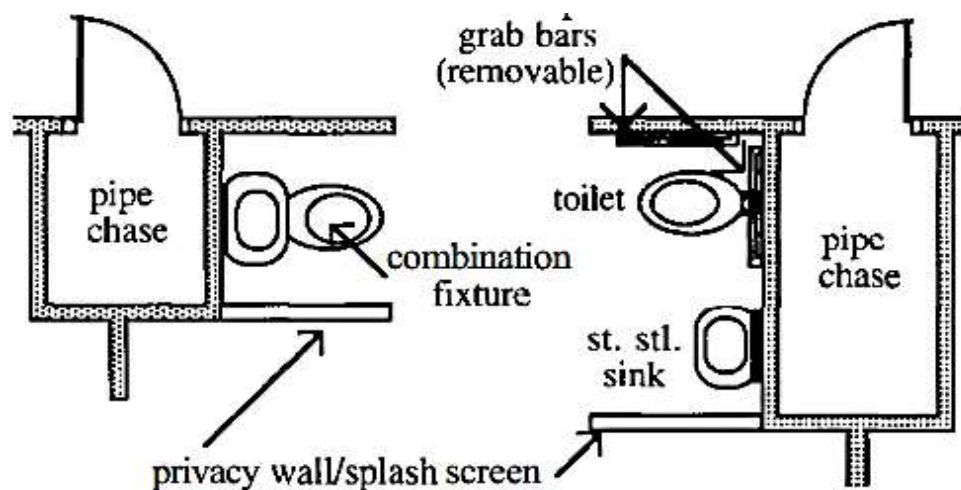
However, evacuation from the building itself may be necessary. In this case, it may be useful to let an out-door exercise area double as a place of outdoor refuge, thus solving evacuation needs without releasing inmates to the street.

- Security exit door from the refuge area to the outside should be provided, with a security lock, hardware, jamb, head, and threshold.
- A two-door vestibule system at the exercise wall is another possibility.



Plumbing features:

A toilet and sink occupy square footage. Besides the possibility of a pipe chase intrusion the key space- defining issue is whether a combination toilet/ sink or more normal, but space- occupying, separate fixtures will be used.



Design Attributes

"The prisoner is not the one who has committed a crime, but
the one who clings to his
crime and lives it over and over."

-Henry Miller

FURNITURE AND FIXTURES:

Beds:

Purpose:

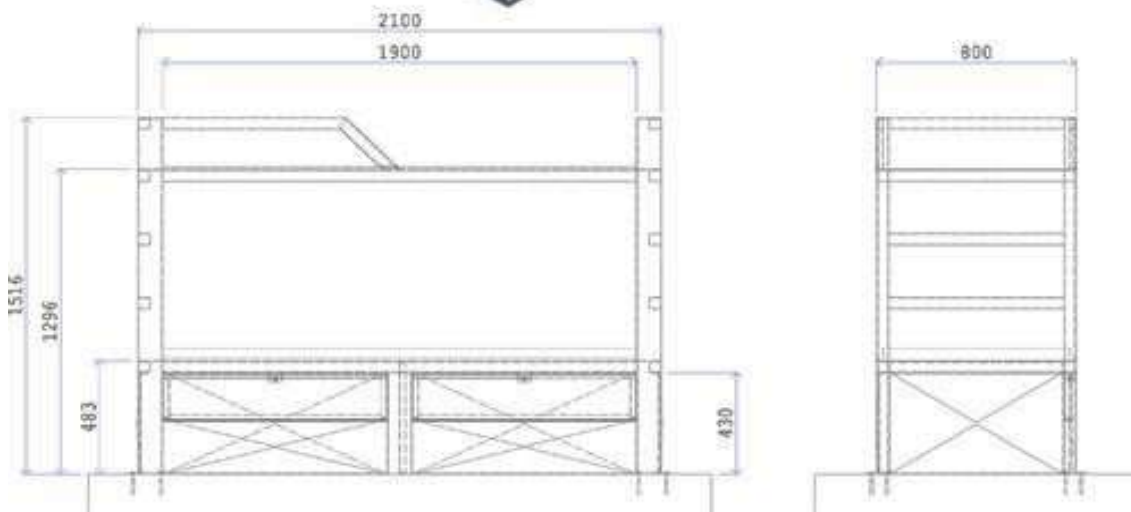
A secure steel double bunk bed with integral lockable storage for prisoner use. Designed specifically for use within a prison dormitory cell.

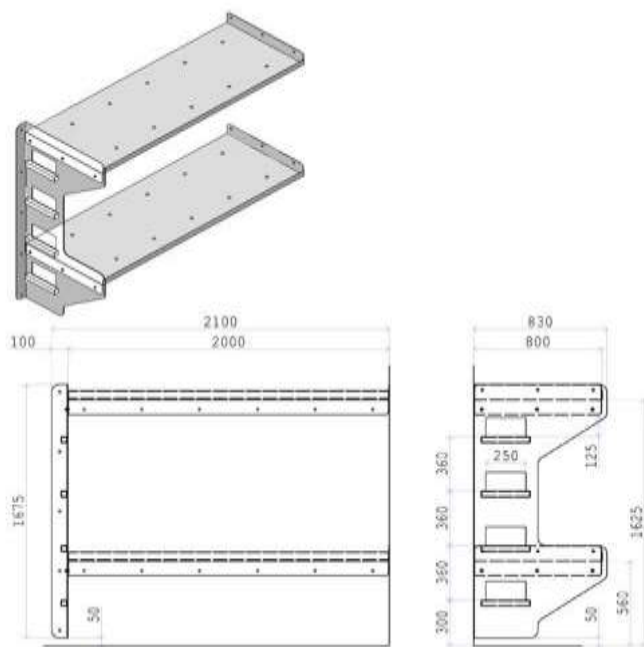
Specification:

- Beds are constructed from 3mm thick mild steel sheet with formed safety edges.
- Robust welded steel framework.
- Incorporated ladders each end.
- Top bunk guard.
- Beds secured to the floor via heavy duty tamper resistant expansion bolts.

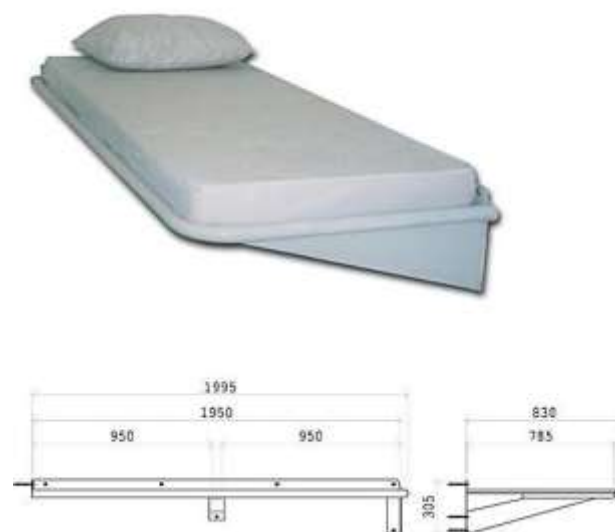
Finish:

Polyester paint





Wall Fixed Cell Double Bunk Bed



Wall Fixed Cell Single Bunk Bed



Hospital Bed

Seating:

Purpose:

A robust steel cell writing table with combined stool suitable for use in prison cells.

Specification:

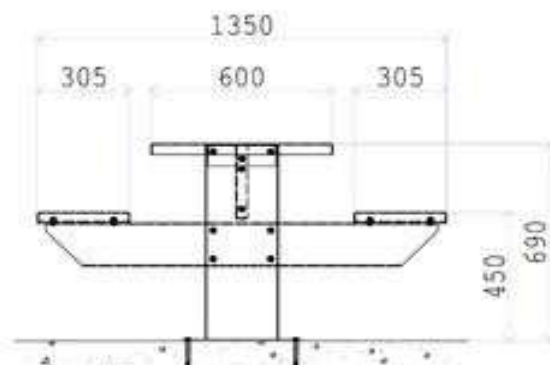
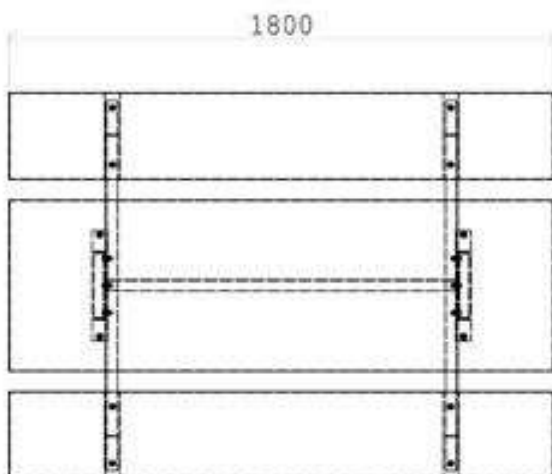
- Welded steel tubular support frame.
- Table and seat constructed from stainless steel grade 304.
- Secured to floor and wall with tamper resistant expansion bolts.

Finish:

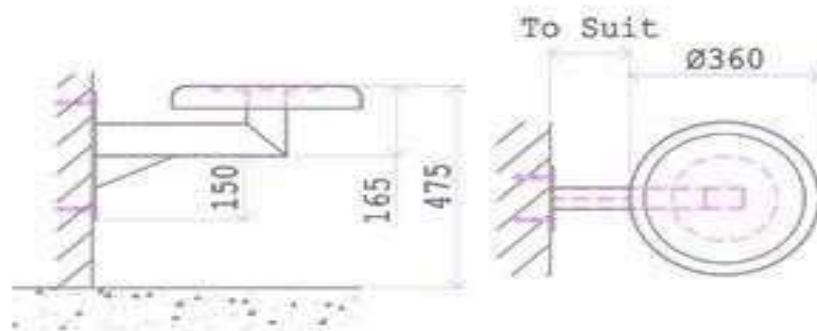
- Tubular support frame - polyester paint Oyster Grey.
- Table and seat satin stainless steel.



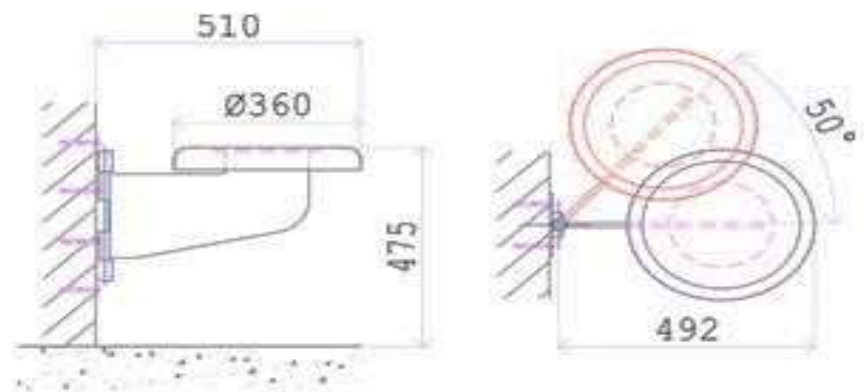
Education seating



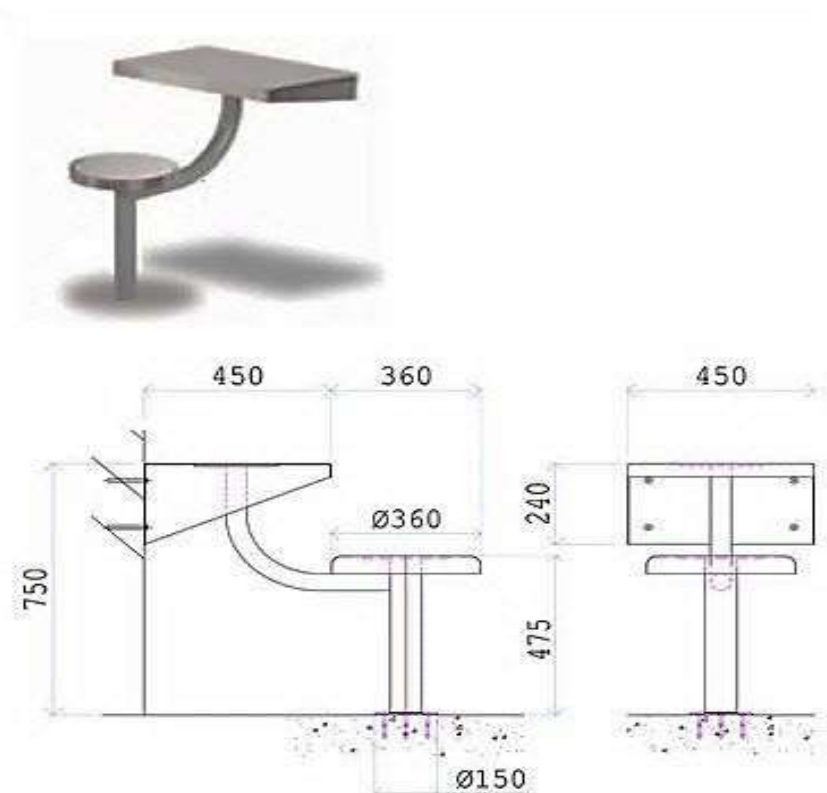
Outdoor table



CSL0537A Fixed Steel Stool



Wall mounted steel stools



Steel Cell Writing Table with Combined Stool

Wardrobe:**Purpose:**

A robust secure steel floor standing wardrobe designed specifically for use within a prison cell.

Specification:

- Constructed from 50mm x 50mm x 6mm steel angle framework with 3mm mild steel folded sheet.
- Wardrobe incorporates two welded shelves and clothes rail.
- Secured to the floor with heavy duty expansion bolts.

Finish:

Polyester paint Oyster Grey.



Open cell wardrobe

Ceiling:**Purpose:**

A secure steel plank interlocking internal ceiling system suitable for use in secure areas.

Specification:

- 1.5mm thick pressed steel planks.
- Interlocking design supported by perimeter supports.
- Planks can be perforated or non-perforated.
- Standard plank widths 300mm, 450mm, 600mm.
- Standard plank lengths 2500mm and 3000mm.
- Planks cut to length on site.
- Planks can be insulated above after installation.



Secure steel ceiling



Secure mesh ceiling

Finish:

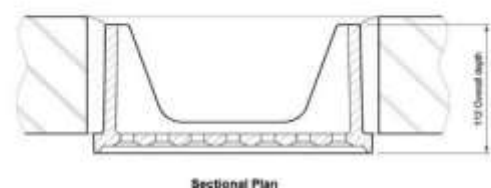
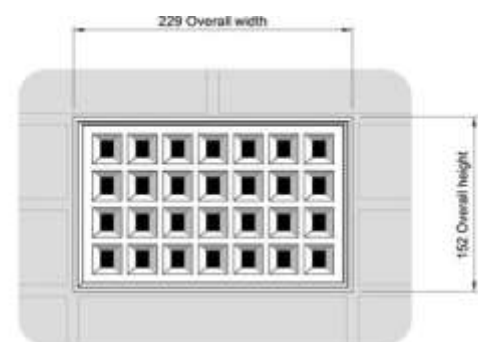
White polyester paint.

Ventilation grilles:**Specification:**

Constructed from cast iron, the unit is designed as an alternative to earthenware air bricks in vulnerable locations. For example at low level in exterior walls to provide ventilation below cell benches or in exercise yards.

Finish:

Hot dip galvanized.



Cast iron air brick

Sanitary ware:

Squatting pan:

Specification:

Constructed in one piece without joints or crevices from 1.6mm grade 304 stainless steel.

Supplied as standard with a 110mm diameter vertical waste outlet and a 38mm diameter back entry flushing terminal.

Finish

Exposed surface of the pan is polished to a satin finish.



Squatting pan

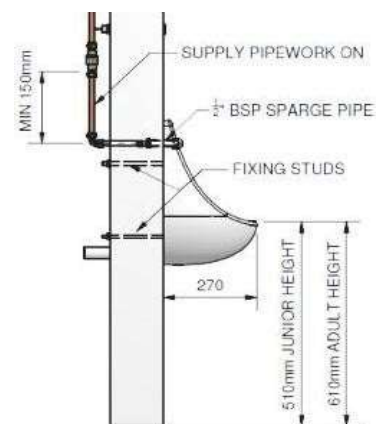
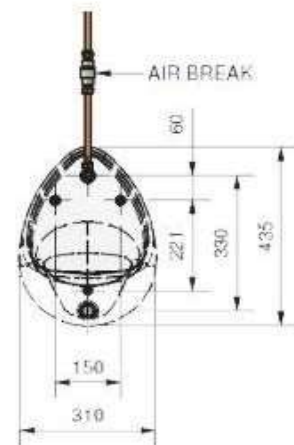
Urinal:

Specification:

- Cast as a single piece with hidden, rear entry services and wall fixings.
- Highly vandal resistant.
- Hygienic and easily cleaned.
- Proven long term product life.
- Concealed rear service access for supply inlet and waste outlet.
- Non flammable, durable, stain resistant, cigarette burns etc.
- Supplied complete with fixings, chrome plated spray flush outlet, waste strainer and waste pipe.

Finish:

- Anti-shatter molded resin.
- White sanitary ware grade gel coated finish.



Urinal

Non Concussive Wall Mounted Push Taps:

Specification:

- Functions for a period of time and then closes automatically.
- Non concussive operation.
- Variable time flow.

Finish:

High polished chrome brass body.



Non Concussive Wall Mounted Push Taps

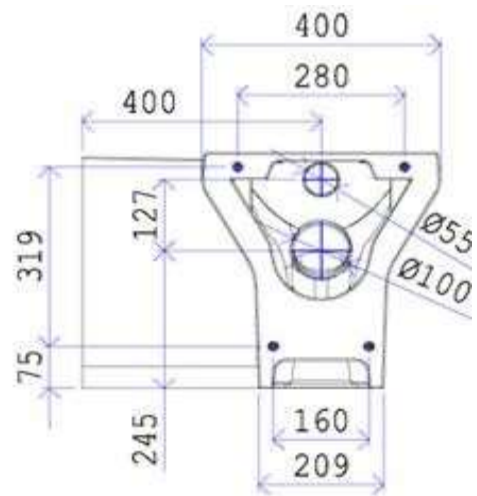
WC Pan corner:

Specification:

- Designed for high-security applications.
- Virtually indestructible.
- High impact resistance.
- High chemical resistance.
- Secure wall mount fixings (included).
- Hygienic nonporous surface.

Finish:

- Anti-shatter molded resin.
- White sanitary ware grade gel coated finish.



Steel Gully Drainage Grate:

Specification:

- Ideal for use where high security steel gully drainage grates.
- Outlet size 113mm diameter.

Finish:

Stainless steel.



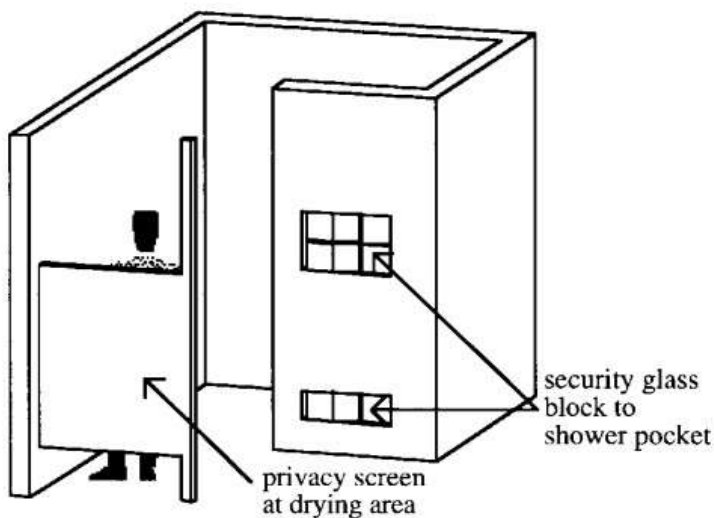
Steel Gully Drainage Grate

Shower Cubicle: Specification:

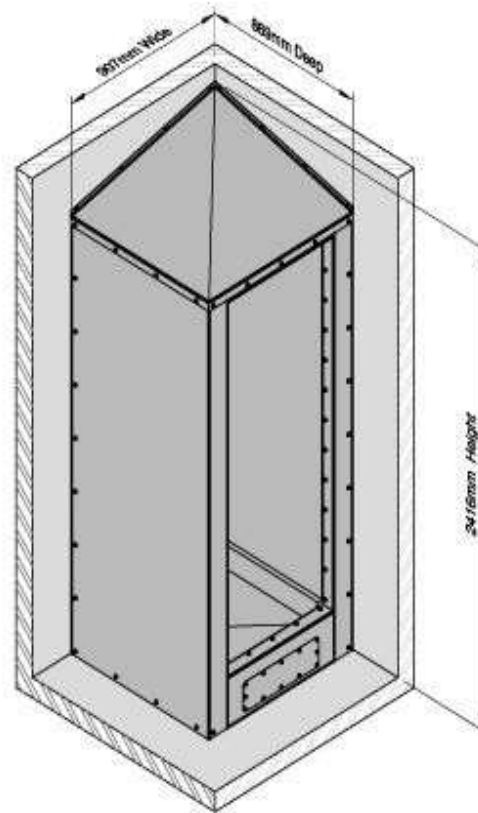
- Cubicle constructed from grade 304 stainless steel, with all exposed surfaces polished to a satin finish.
- Supplied either as right or left hand in a one piece welded unit incorporating built-in shower tray with central outlet, stainless steel soap tray, integral mounting feet, removable front access panel held in position by security screws.
- All pipework supplied and concealed within the unit.
- Internal size 750mm x 750mm x 2000mm high.
- Fitted with vandal resistance shower spray head, 38mm (1.1/2") unslotted flush grated waste outlet.
- Mechanical push button, which gives approximately 30 seconds operation.
- Hot and cold water supply thermostatic mixing valve.

Finish:

Stainless steel satin finish.



Alternative of shower cubicle



Additional Options:

Cubicle supplied in knock down form for site assembly where access is restricted for assembly on site by others.

Open or closed top.

Multi-units can be bolted together to form ranges.

End closure panel for free standing locations.

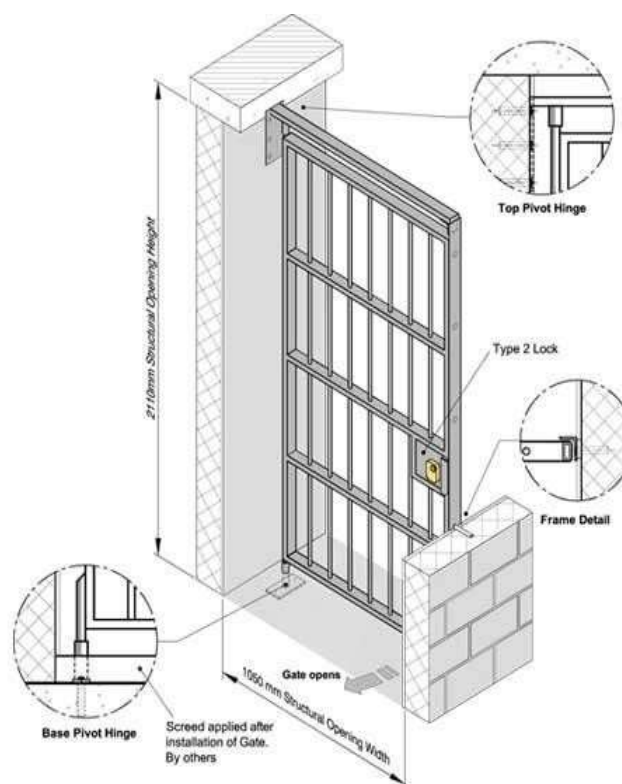
Electrical operated shower in lieu of mechanical timed flow valve.

Doors:

Medium Duty Grille Gate:

Specification:

- Gate is constructed from 50mm wide steel RHS framework with 20mm diameter solid vertical bars.
- Mounted on strong pivot hinges.
- Frame fixings to suit a variety of opening construction.
- Type 2 heavy duty mortise deadlock.



Medium Duty Grille Gate

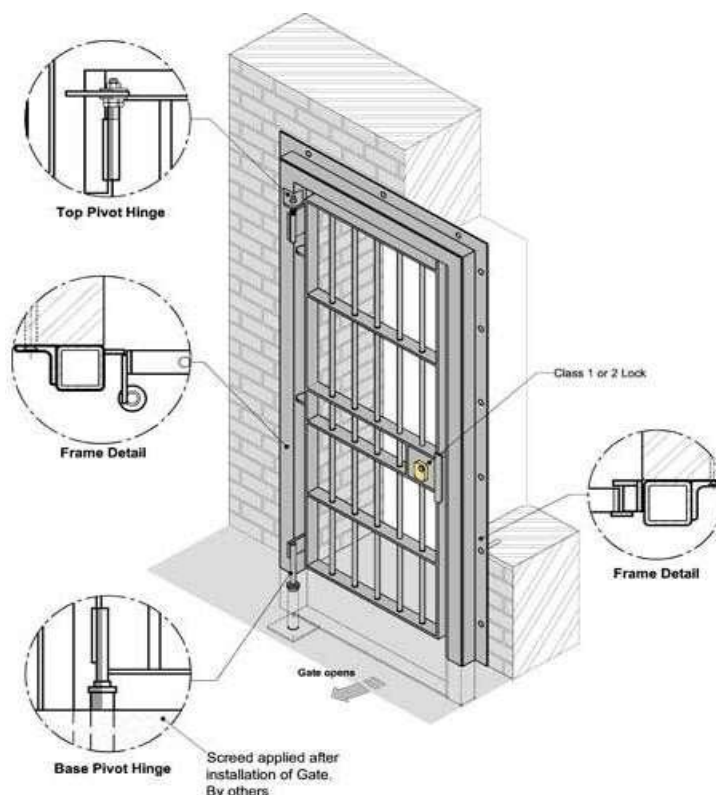
Finish:

One coat factory applied high build zinc phosphate primer.

Surface Mounted Heavy Duty Gate:

Specification:

- Gate is constructed from 65mm x 12mm flat steel framework with 30mm diameter solid vertical bars.
- Mounted on pattern pivot hinges.
- The Gate is mounted within a RHS and RSA frame and is fixed by chemical resin anchors.



Surface Mounted Heavy Duty Gate

Finish:

One coat factory applied high build zinc phosphate primer.

Windows:

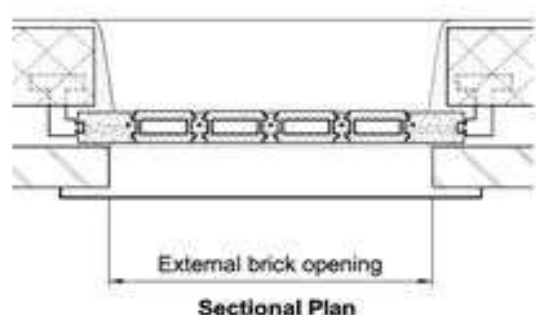
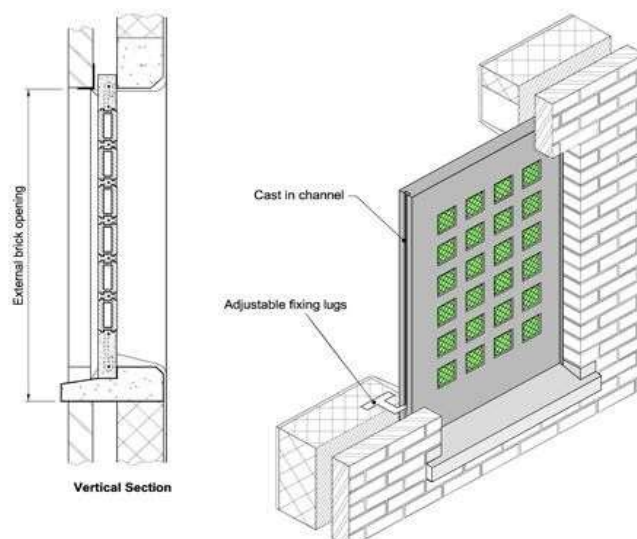
Built-in Cell Window:

Specification:

- Windows are constructed from pairs of 22mm thick annealed glass lenses hermetically sealed and set into 72mm thick structural cast stone.
- Fully welded at each intersection 10mm diameter internal reinforcing bars at 165mm centers.

Finish:

Acid etched inside & smooth trowel finish outside from a range of 12 standard colors.



Built-in Cell Window

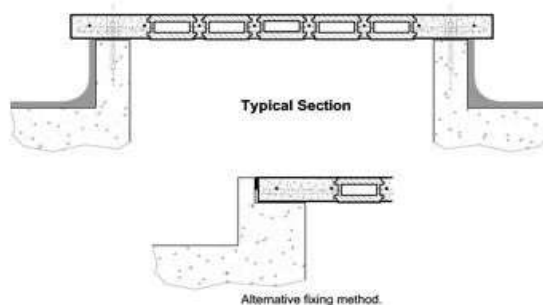
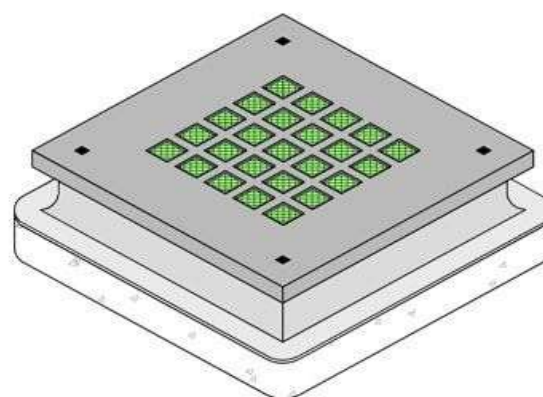
Roof Light:

Specification:

- Roof lights are constructed from pairs of 22mm thick annealed glass lenses hermetically sealed and set into 75mm thick structural cast stone.
- Fully welded at each intersection 12mm diameter internal reinforcing bars at 165mm.
- Fixings, securely fixed to suit a variety of opening construction, with fixings „concreted in“ after installation.

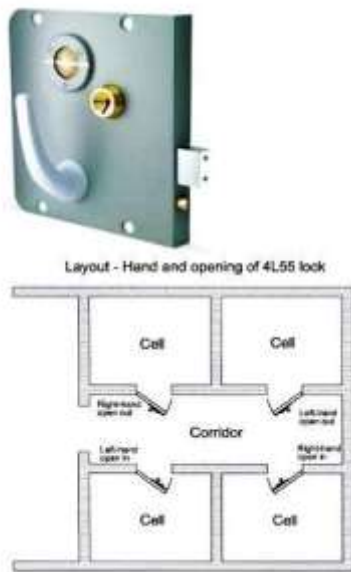
Finish:

Portland grey (22c), acid etched inside & smooth trowel finish to top side.

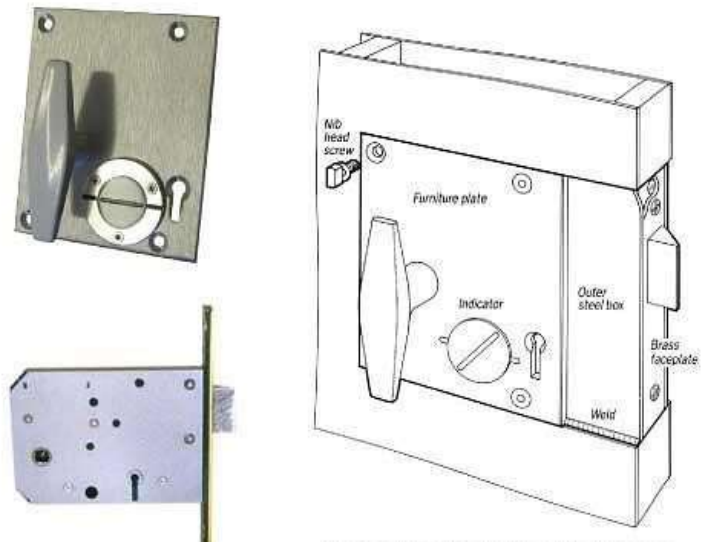


Roof Light

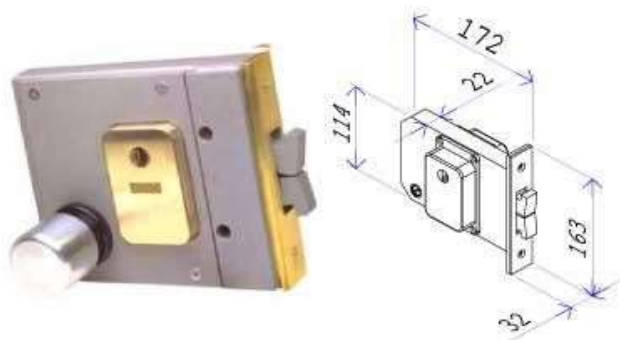
Locking systems:



Cell Lock



Cell Lock mounted in a steel door



Pass Lock



Heavy Duty Digital Lock



Drop Forged Closed Shackle

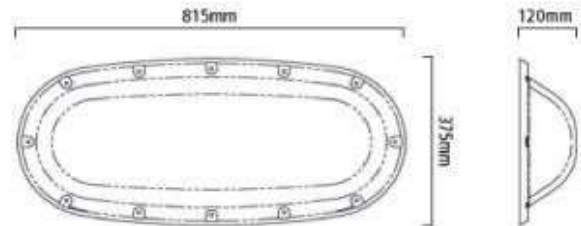


Open Shackle Padlock

Interior lighting:



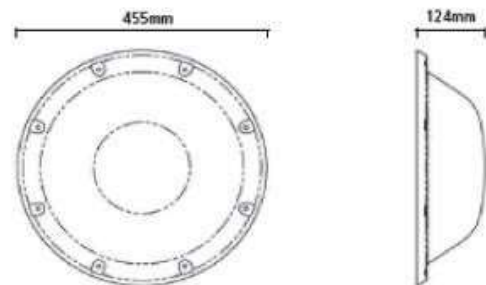
Bulk Head LED Light



Safer Cell Surface Mounted Light



Retrofit LED Light



Safer Cell Circular 2D Light

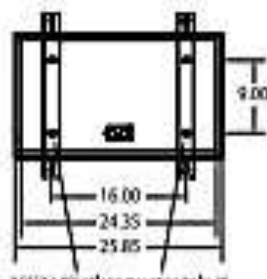
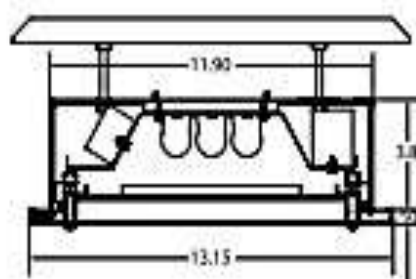


Perimeter Light

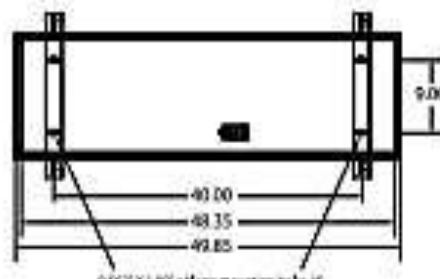


Corridor Ceiling Tile LED Light

CROSS SECTION AND LONGITUDINAL



0.562" X 1.80" oblong mounting holes 4H
Cabinet Dimensions 12 X 24 X 15



0.562" X 1.80" oblong mounting holes 4H
Cabinet Dimensions 12 X 48 X 15

SPECIFICATIONS

Housing

Die formed and welded construction for maximum durability and impact resistance. 16 ga. cold rolled steel gauge construction.

Door

One piece, die formed construction maximizes resistance to impact. Available in 16, 14 or 12 ga. cold rolled steel reference Selection Chart.



Hinge

Continuous, concealed piano hinge with pin welded to knuckle to prevent removal. Hinge is welded to door frame and securely attached to housing.

Lens

Choice of acrylic, polycarbonate, or tempered glass lensing. Specified as internal (fixture) and external (environmental) sides. Reference ordering matrix for lens materials.

Electrical

All ballasts are class P, UL listed, CBM/VETL certified.

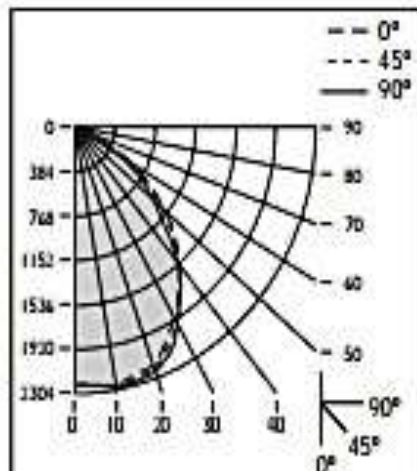
Finish

All metal components are finished in a polyester powder coat applied over a 5-stage pre-treatment process.

Reflectance: 94%, **Hardness:** 2H, **Salt Spray Test:** 500 hours.

Listings

UL/cUL listed for damp locations.



Lens Retention

Lens secured to housing with thru-studs (permanently embedded on 6" maximum spacings) and vertically adjustable, continuous lens retention hold downs.

Fasteners

Hardened security fasteners, as specified. Reference ordering matrix for specifications.

VISUAL APPEARANCE:

The jail will project an "image" and give a message to the people who pass by, visit, work, or are confined there although the way each person responds to it will depend on why they are there.

The building's image helps people recognize the type of place it is and establishes their expectations for what will happen there, how they will be treated, and how they should behave. The typical jail of the past is easily recognizable hard and impenetrable, with steel bars and barbed wire.

Many people now think that this traditional jail image is inappropriate given new attitudes about the role and purpose of the jail; that is, the desire to elicit normal behavior and to create a positive and accessible addition to the local community. Older jails tend to convey a message only of punishment and inaccessibility.



Familiar jail appearance in the past



Modern jail appearance

Exterior:

The outside of the building will convey a message to the public about law enforcement and the role of the jail in the community. It should be decided what is wished to be conveyed, an image of community service, deterrence, frugality, or some other quality. In considering the jail's appearance, take into account the context in which it will be located.

If it is to be located in the town, it may be important to repeat the materials, colors, and scale of surrounding buildings so that it fits in. If the jail is to be near or adjacent to other government buildings, it is probably desirable to have the jail complement those buildings to create a unified and identifiable government image. If the jail is to be located away from other buildings, the desired architecture elements or materials can be selected.

Interior:

The interior image and character of the jail environment will be most important to staff and inmates, but will also be important to visitors. Staff will spend more time in the jail over the years than will individual inmates.

The image and character of the jail interior can affect staffs satisfaction with their jobs and can send a message about how they are perceived by their employers. The interior of the jail can also express and reinforce an expectation about inmate behavior, since all people tend to respond to their environment.

That is why good church design inspires quiet and reverence, why good field house design encourages participation, and why good office design enhances productivity.

These concerns must be balanced against the perceptions of elected officials and the public. An interior that appears too nice to the casual observer can be interpreted as an intent to "coddle" inmates and create a "hotel-quality" environment.

The mission statement of the jail will go a long way toward setting the aesthetic tone for the interior.

Effects of the exteriors and interiors of the jail on the psychology of the inmates:

Research has shown that where jails have eliminated the symbols of incarceration and provided a more normal setting, there have been positive effects such as reducing stress, vandalism.

These jails tend to use such elements as:

- Carpet on the floor
- Wooden doors in cells
- Bright colors
- Lots of daylight

While using these features may seem counter to ideas about what makes a jail secure, inmates tend to treat the jail with more respect if its design communicates to them that they are also going to be treated with respect. Differentiating the physical character of housing units can also be used to reinforce good behavior. For example, disciplinary housing units could have a more traditional jail appearance, such as concrete floors and fixed furniture, than the normalized general housing units. Thus, a more normal environment can be a reward for good behavior.

Maintenance of physical security:

- Concrete floors can be underneath a carpet
- Reinforced and grouted concrete masonry units can be underneath bright and pleasing paint colors
- Wooden doors where penetration of the door only allows access to a supervised dayroom
- Daylight can be provided by security-glazed openings looking into controlled exterior courtyards

Describing desired appearance:

Adjectives should be used to describe the desired appearance of the new jail to the design team, or reference should be made to other buildings that look the way that is wanted. Here are some pairs of adjectives from which to choose:

- Open -- Closed
- Spacious -- Confined
- Controlled -- Free
- Warm -- Cold
- Welcoming -- Rejecting
- Minimal -- Adequate -- Generous
- Light, bright -- Dark, Dim
- Colorful -- Plain
- Soft -- Hard
- Friendly -- Unfriendly
- Safe -- Dangerous

TEXTURES :

Stone:

In most of the prisons that we see in our country today, stone has been used as the dominating material. Stone gives a sense of roughness, coarseness, heaviness and massiveness which psychologically affects the mental state of a person being kept surrounded by it all day.

Glass and steel:

Glass and steel give a sense of openness and transparency. Glass appears to be a lighter material than stone because of which it does not impart any sort of psychological weight onto the mental state of a person.



Stone giving a sense of roughness, coarseness, heaviness and massiveness



Glass and steel giving a sense of openness and transparency

LIGHTING:

Natural lighting:

- Humans are affected both psychologically and physiologically by the different spectrums provided by the various types of light.
- These effects are the less quantifiable and easily overlooked benefits of day lighting.
- Day lighting has been associated with improved mood, enhanced morale, lower fatigue, and reduced eyestrain.
- One of the important psychological aspects from day lighting is meeting a need for contact with the outside living environment.
- It is imperative to have natural lighting provision in the cells and barracks even though there is provision for artificial lighting.



Tihar jail cells where there is insufficient natural lighting

Artificial Lighting:



Cool white fluorescent lights are concentrated in the yellow to red end of the visible light spectrum.



Incandescent lamps, are concentrated in the orange to red end of the spectrum.



Energy-efficient fluorescent lighting is typically concentrated in the yellow to green portion of the spectrum.

These three light sources lack the blue portion of the color spectrum, which is the most important part for humans and is best provided by natural light.



Full-spectrum fluorescent lighting is the electrical light source that has a spectrum of light most similar to natural light because it provides light in the blue portion of the spectrum.

Fluorescent lighting produces glare. At some prisons to stop this glare from hitting the eyes, they have painted over the plastic light covering with coloured oil paints, or used crepe paper, or the regulation orange cellophane filter in an attempt to stop the headaches and eyestrain.

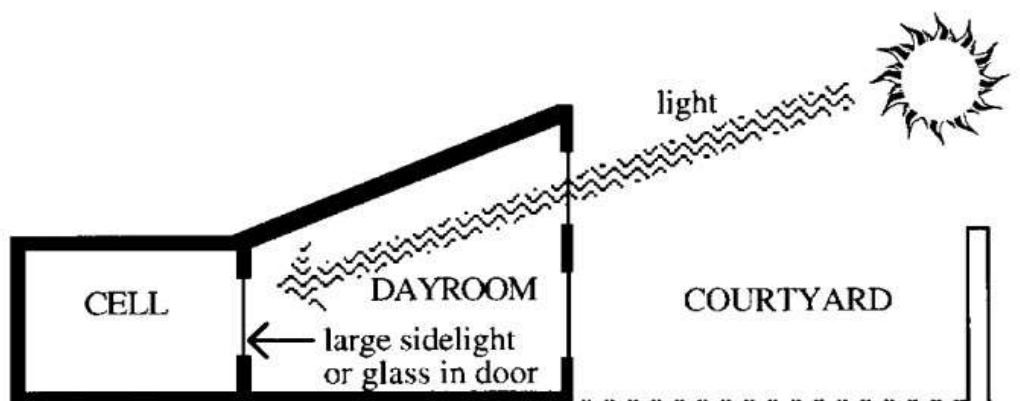
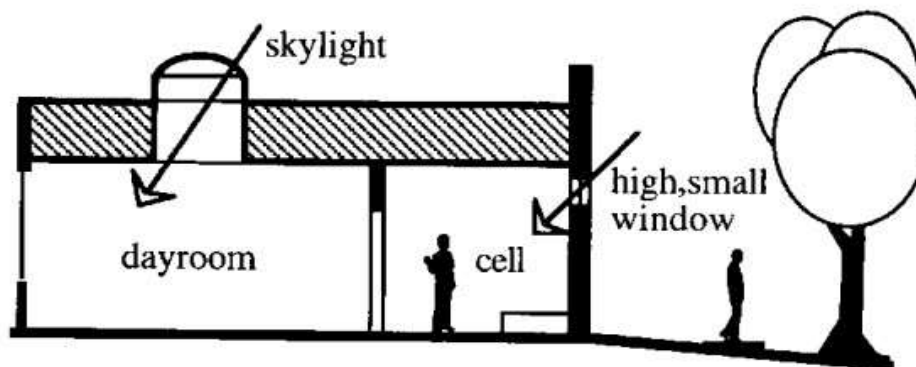
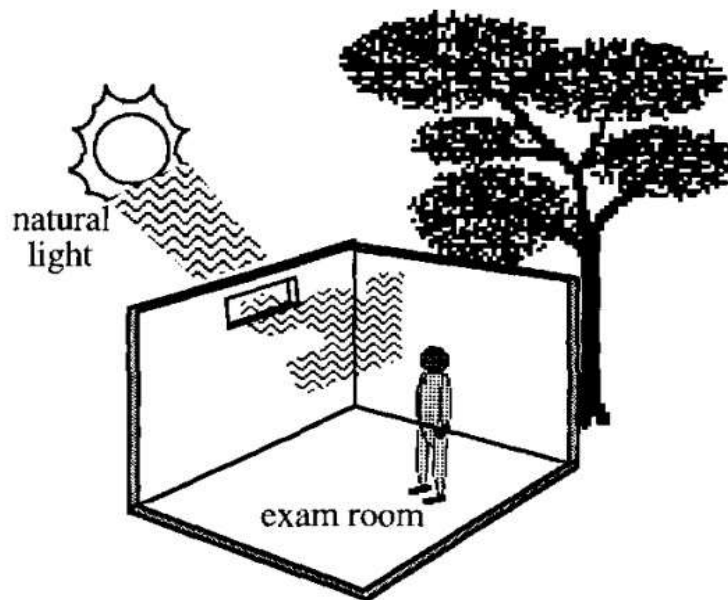
Also, certain types of fluorescent tubes leak radiation and some may lead to a depletion of brain chemicals such as serotonin and melatonin.

This can lead to the kind of depression that in extreme situations precipitates suicide. Fluorescent lighting is not meant to come into general use: it is a temporary, emergency.

Following are a list of specifications that should be adopted while prison lighting is considered:

- Should be such that, the luminaires and systems do not allow occupants to self harm.
- Should be such that these luminaires and systems sustain no operational impairment during service.

- Should be such that diffusers will withstand attack from such items as screwdrivers and cutlery and will withstand many minutes of naked flame attack after which there will still be no ligature attachment risk.
- Should be with a completely clear cover and easily visible interior to prevent the concealment of contraband, drugs and weapons.
- Should be a design that includes distinctive security screws which meet the prison's requirement for fittings facilitating quick and easy cell searches.
- Should provide a cost effective solution.



LANDSCAPE:

For the most part, the views surrounding prisons and jails bleak expanses of lawn, chain link security fences, walls and concertina wire. Occasionally the view is broken by perennials planted near an administrative office or a vegetable garden in a secured area. This landscape typology evolved from the real need to keep staff, inmates, and the public safe from harm. Officer sight lines from station posts, towers, and other patrol locations throughout the grounds are unimpeded, allowing for quick identification of, and reaction to, disturbances or illicit behavior.

The landscapes in these facilities can provide therapeutic benefits or a restorative moment for both the corrections staff and inmates. Moreover, there are some wonderful examples of penitentiaries that provide restorative, secure, and ecologically sustainable landscapes.



The Rikers Island Jails in New York allow students in their horticulture programs to beautify the grounds with a diverse arrangement and selection of plants that go beyond your typical geraniums lining an entry walk.

Grounds at other facilities that were historically purposed for a use other than corrections may, in some areas, possess features similar to an academic campus, such as mature trees under planted with shrubs and lawn. It appears as though increased landscape diversity is closely linked to the security classification of specific zones of open space within the complex.

Highly secured zones:

Inmates working and travelling within highly secured zones have been screened and are considered lower security risks. These zones offer the best opportunities to provide therapeutic and ecological benefits for the site since the security classification can accommodate a broader selection of plant species and heights and may allow modest changes to site topography.

Zones including inmates from all classification levels:

In other open space zones, such as those used by inmates from all classification levels, visual complexity and plant diversity will be low due to the higher risk to security in these areas.

Even in these other areas of a complex, there is some flexibility and an opportunity for a broader selection of plants which could provide some level of restorative benefit and improvement to the ecological health of the site.

Heights and positioning of plants:

It's extremely important in these areas that plants are less than 24 inches in height (too low for hiding). They must be pulled several feet away from walks to prevent the hiding of contraband such as weapons and drugs.

Issues caused due to prison landscaping:

Implementing changes to the prison landscape typology necessarily involves the addition of perceived complexity. Visual complexity is introduced as well as the perception of increased maintenance requirements, particularly when the existing landscape is a mown lawn. For officers, the increased complexity and change from the status quo may be perceived as an added, unnecessary risk in their daily efforts to keep the facility secure and themselves safe from harm. In addition, gardens are often viewed as a privilege that lessens inmates' sentences as mandated by the court.

Promotion of a healthy healing place:

Landscape helps promote healthy, healing places, which help improve the inmate health, as well as proving to being more sustainable and energy efficient. A garden or landscape program is beneficial.

Projects that demonstrate cost-effectiveness and produce services for the facility, such as food that will supplement other operations budgets, can help administrators justify approval of the project, explain its need to staff, and generate enthusiasm and wider legitimacy throughout the custody chain-of-command.

Corrections centers are often immense public facilities within our communities that should be highly sustainable.

This includes providing an environment that helps support the mental and physical health of staff and inmates.

Design approach

"Prison robs me of my dignity, my pride; it robs me of my privacy and of my freedom. Prison robs me of anything a man can enjoy in life."

—Prison offender



Every **prisoner is a human being**, with the same joy and sorrow, laughter and tears, hopes and aspirations as any other human being and should be treated with the same **dignity, respect and decency as any other human being**. The very fact that a **prisoner has been sentenced to imprisonment** once and has **suffered enough physically, mentally and emotionally** implies that he is not to be incarcerated through imprisonment once again.

IMPACT OF THE PHYSICAL AND PSYCHOLOGICAL ENVIRONMENT:

Such incarceration can be prevented by creating a congenial environment inside the prison which will be **conducive to the physical, mental, emotional & psychological well being of the prisoner** as an individual on one hand and by bringing about a balanced combination between physical environment with therapeutic care and treatment on the other.

The **physical environment** itself has to be a **balanced combination** between the **needs of security** on one hand and **minimal creature comfort and convenience of the prisoner** as an individual on the other.

Ensuring **right to food, right to potable water, right to personal hygiene and sanitation, right to literacy and education, cultural and recreational rights** of every prisoner as an individual.

Treating every prisoner with kindness and compassion, empathy and sensitivity in the same manner as late V. Shantaram, the outstanding **Marathi and Hindi film personality had demonstrated in his classic film, „Do Aankhen Barah Haath“** in the 60's.

Creating an institutional mechanism through which all day to day grievances of the prisoners can be ventilated and positively redressed.

Removing feelings of fear, anger, irritation, hatred, distrust, suspicion and revenge in the minds of prisoners and **replacing the same by fellow feeling, warmth, cordiality, brotherhood and bonhomie.**

Instilling **hope, faith** into the mind of every prisoner that despite the trying circumstances under which the prisoner was brought into the prison, all is **not lost and a life of dignity and decency can be started afresh.**

The **goal of a correctional facility/ prison must give way to a clear prisoner-oriented rehabilitative service.**

A useful saying is a simple one: "the less like a prison, and the more like the free world, the better."



Important spaces like the cells, reformation and work areas must be designed in a way so as to help the inmate feel the sense of reformation and rehabilitation. Since these are the places where the inmate spends maximum of his time, it is imperative to use these areas in order to positively influence the psychology of the inmates. This can be done with the assistance of the various materials, textures, colors, furniture and lighting used in the facility.

Prisons that give inmates opportunities to exercise personal initiative must be created. **Safe correctional environments** that remove the need for hyper vigilance and pervasive distrust must be maintained, ones where prisoners can establish authentic selves, and learn the norms of interdependence and cooperative trust.

A clear and consistent emphasis on **maximizing visitation and supporting contact with the outside world** must be implemented, both to minimize the division between the norms of prison and those of the free world, and to discourage dysfunctional social withdrawal that is difficult to reverse upon release. Prisoners must be given **opportunities to engage in meaningful activities, to work** etc.

The increased use of forms of extremely harsh and psychologically damaging confinement must be reversed.

A very important question is, what happens to the prisoners after completing their sentence? Where do they go? What do they do? This is when the following comes into consideration:

TRANSITIONAL SERVICES TO PREPARE PRISONERS FOR COMMUNITY RELEASE:

Persons who return home from prison face personal, social, and structural challenges that they have neither the ability nor resources to overcome entirely on their own.

Post-release success depends of the **nature and quality of services and support provided in the community**, and here is where the **least amount of societal attention and resources are typically directed**. This tendency must be **reversed**.

By providing such a **transitional space**, between the **prison premises and the prisoner's home**, it will help **guide the inmate**, give him a **sense of progression** and will make him **look forward to being rehabilitated and reformed** into a **completely different being** who has **learnt from his mistakes** and is ready to **contribute constructively to the society** in some way after being released.

This transition space could have **various activities and programmes** which could help in the **development of the inmates** into **responsible citizens of our country**:



**World inside
the prison**



**Transitional
space in
between**

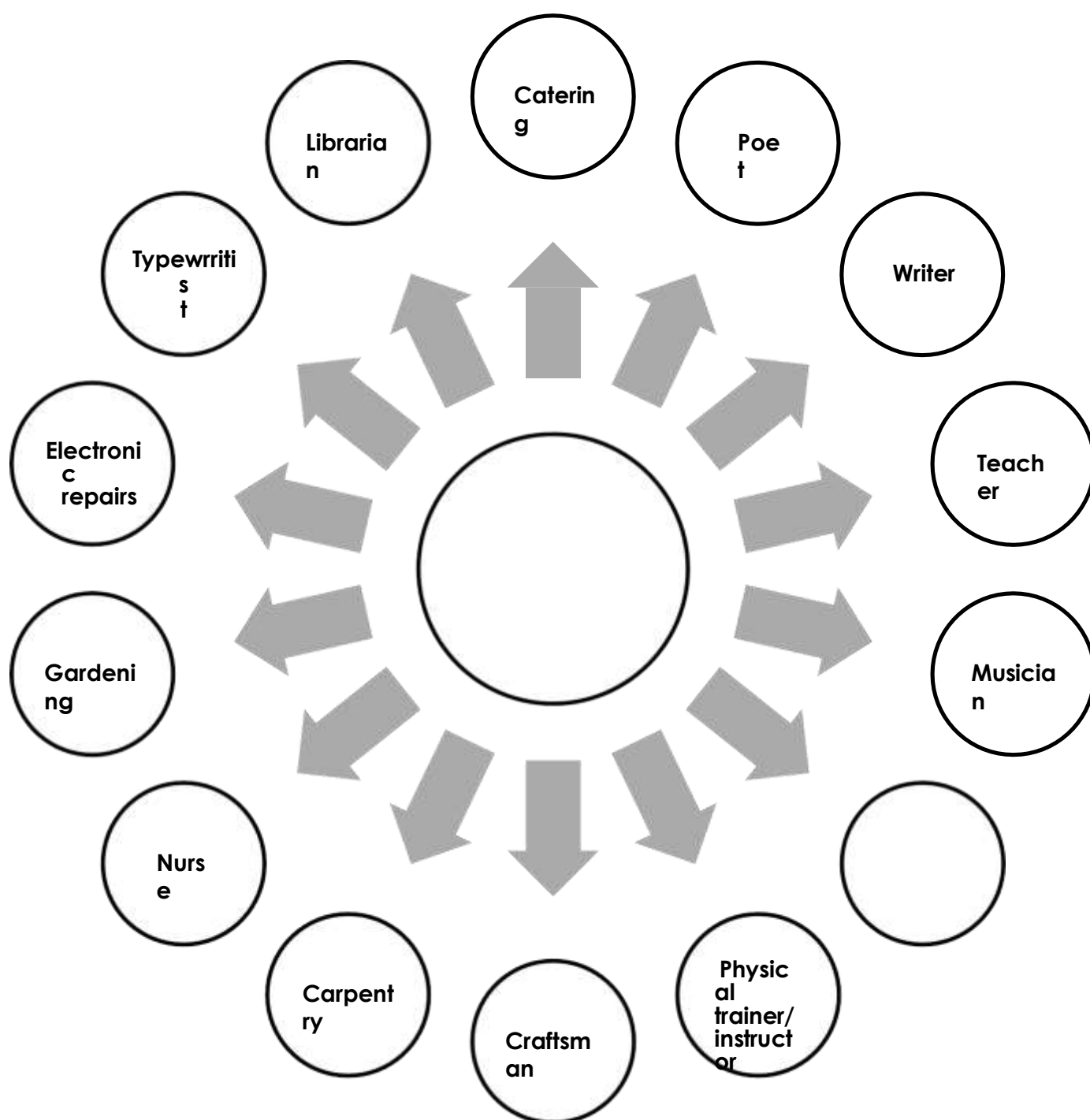


**World outside
the prison**

JOB OPPORTUNITIES:

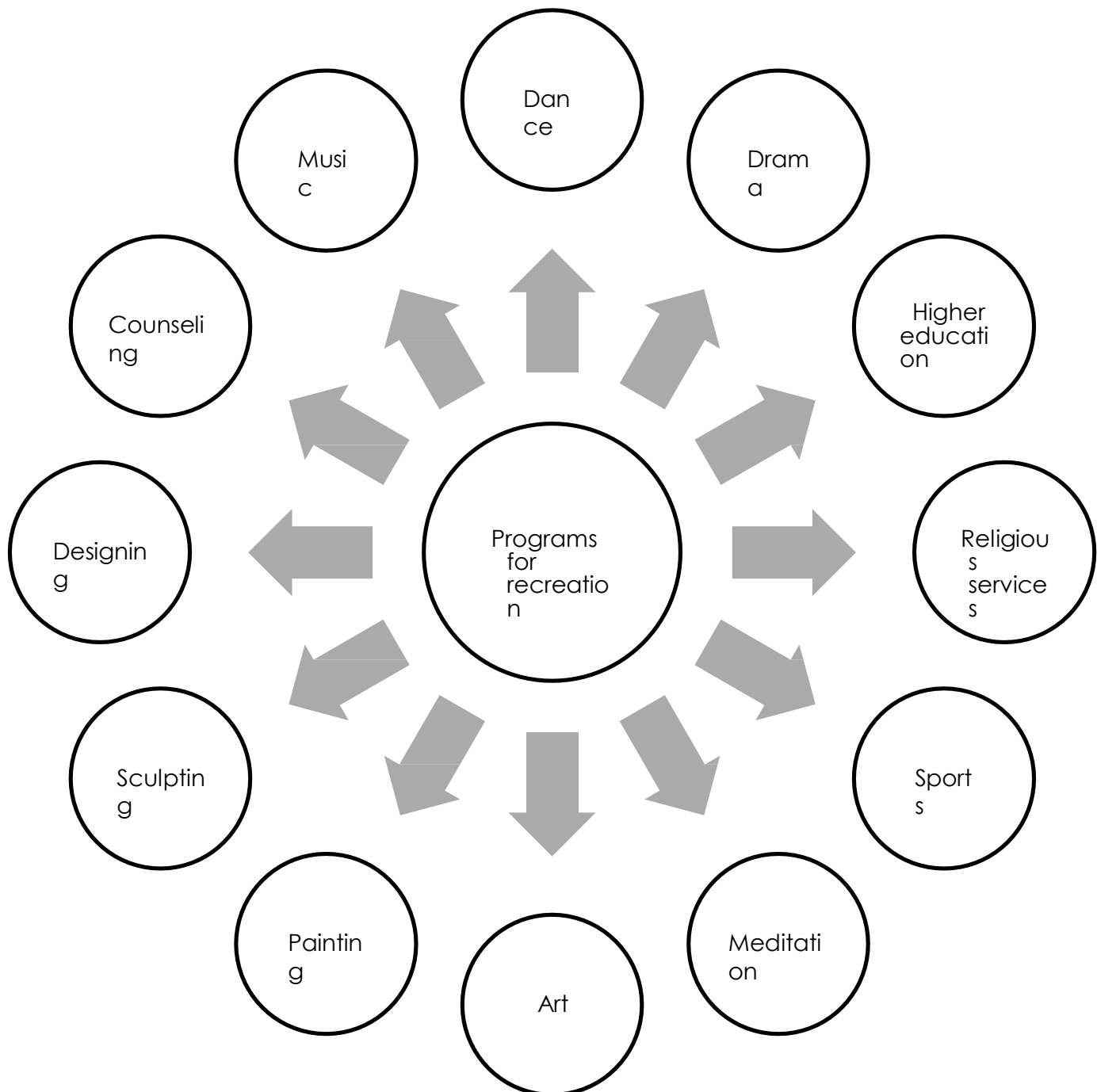
The **skills of the inmates should be explored** and pertaining to his/ her interest and choice he/ she should be given an opportunity to learn from a **given choice of works** which would lead to **giving them job opportunities in various sectors post- release.**

In order to encourage the participation of the inmates, there could be organizations and offices that recruit these inmates in order to give them some sort of start or push towards the right direction. This will also make them look forward to something and give them self confidence instead of making them apprehensive as to how the outside world would treat them.



Gainful employment is perhaps the most **critical aspect** of **post-prison** adjustment. The **stigma of incarceration** and the **psychological residue of institutionalization** require **active and prolonged agency intervention** to **transcend**.

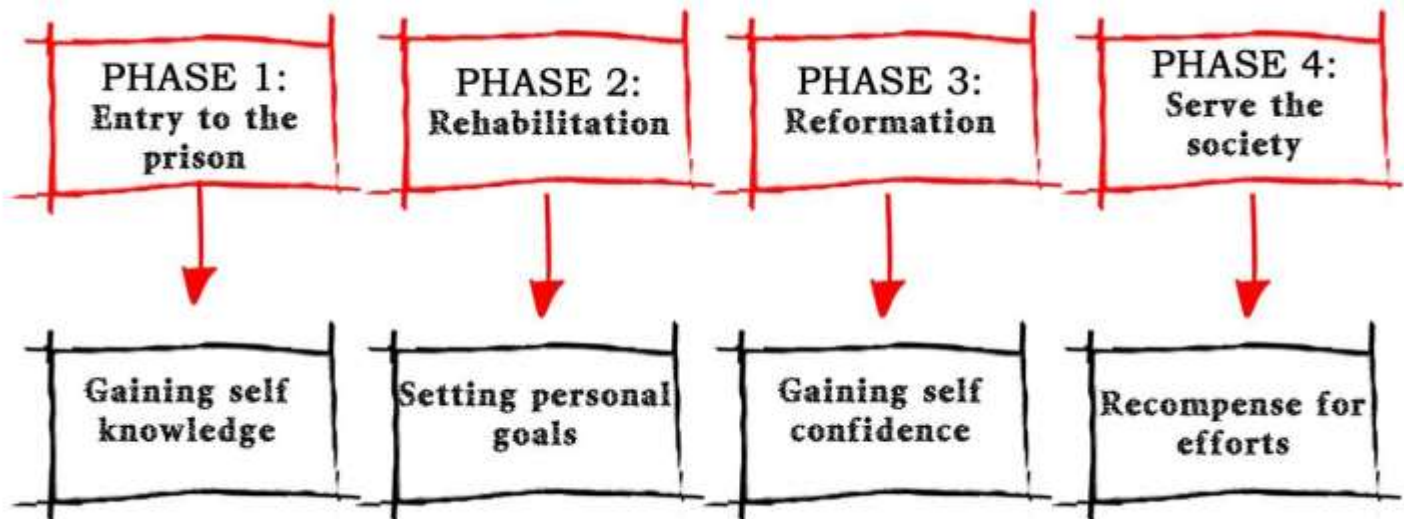
PROGRAMS FOR REFORMATION:



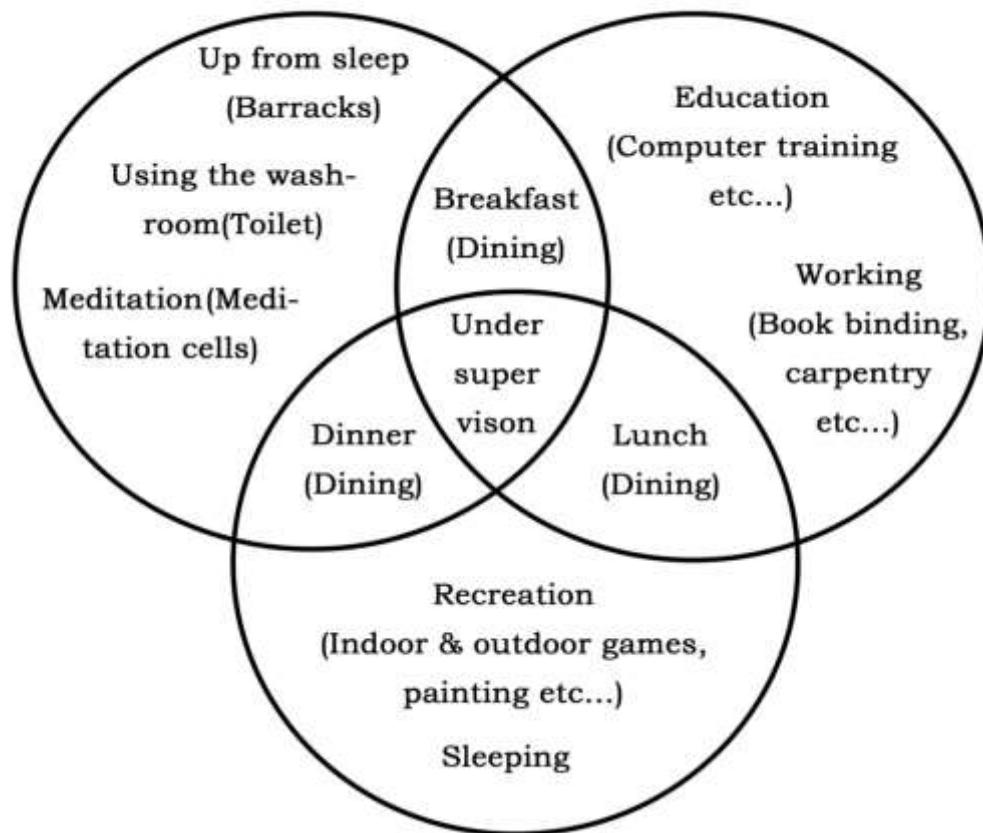
Provision of various activities, **hampers a chance for the inmate's mind to remain idle at any point**. Using the **maximum possible potential of the inmates** and **displaying their creative side** in front of their own eyes will make them **realise their productivity levels**.



PHASES THAT THE PRISONER UNDERGOES DURING HIS LIFE:



DAILY SCHEDULE OF THE PRISONER:



BASIC ZONING:

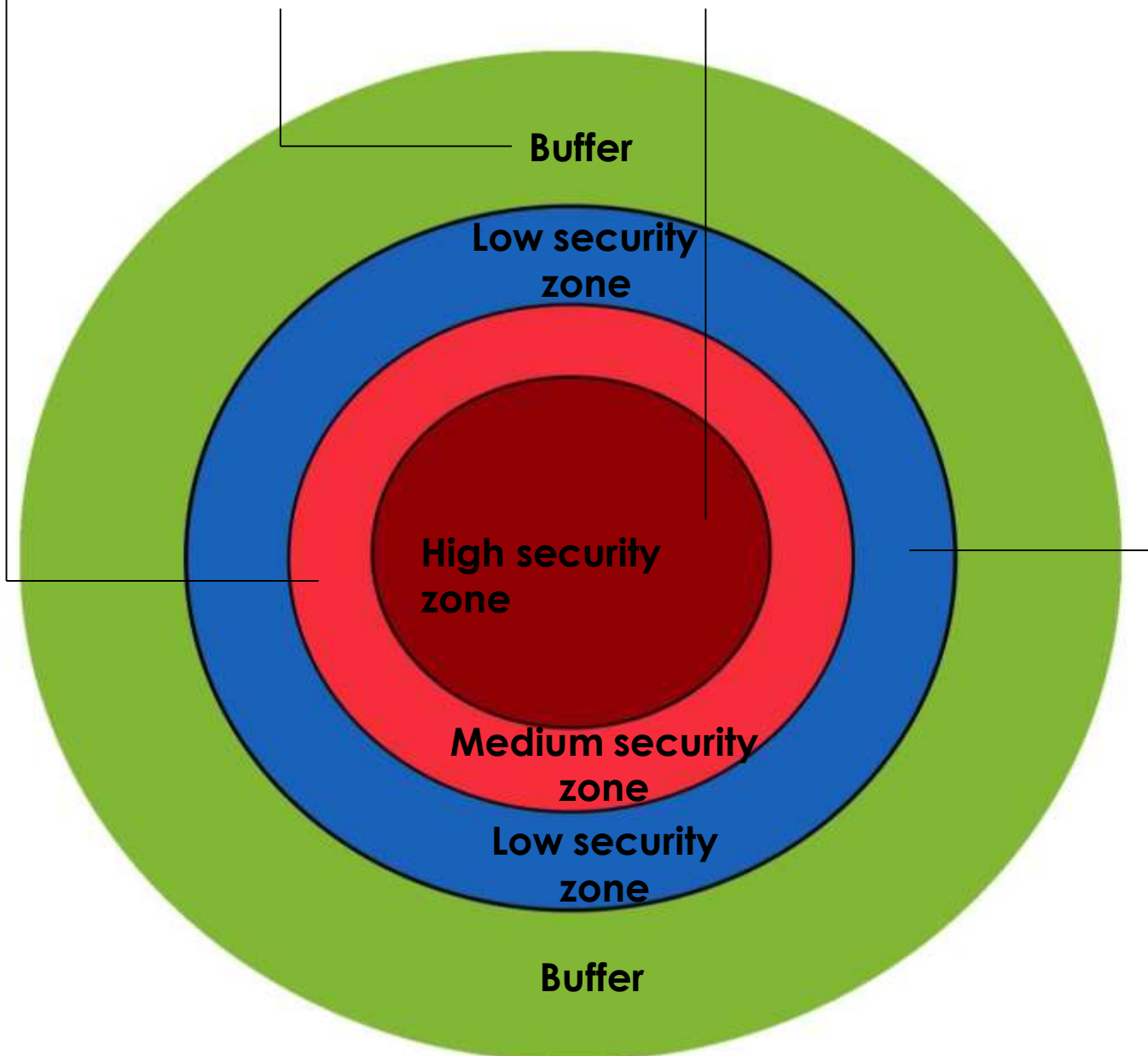
The medium security zone consists of barracks for the under trials and convicts.

(Chain snatchers, thieves, hit and runs etc...)

The low security zone consists of the recreational area(indoor games, playground), education area(classrooms teaching computer courses etc...) and the sacred area (libraries, cells, prayer halls).

The entire prison is buffered by a layer of plantations along the periphery. (Lawn area)

The high security zone consists of the cells for the hardened criminals. (rapists, serial killers, terrorists)





Buffer zone



Low security zone



Medium security zone



High security zone

INDOOR SPACES:

KITCHEN, DINING AND RECREATIONAL ACTIVITIES



Dining at Tihar jail on the floor creating unhygienic conditions.



Various activities like meditation cells, dancing and theatre classes, indoor games, lectures on degree courses to promote the sense of recreation and education amongst the inmates.

INDOOR SPACES:

KITCHEN, DINING AND RECREATIONAL ACTIVITIES

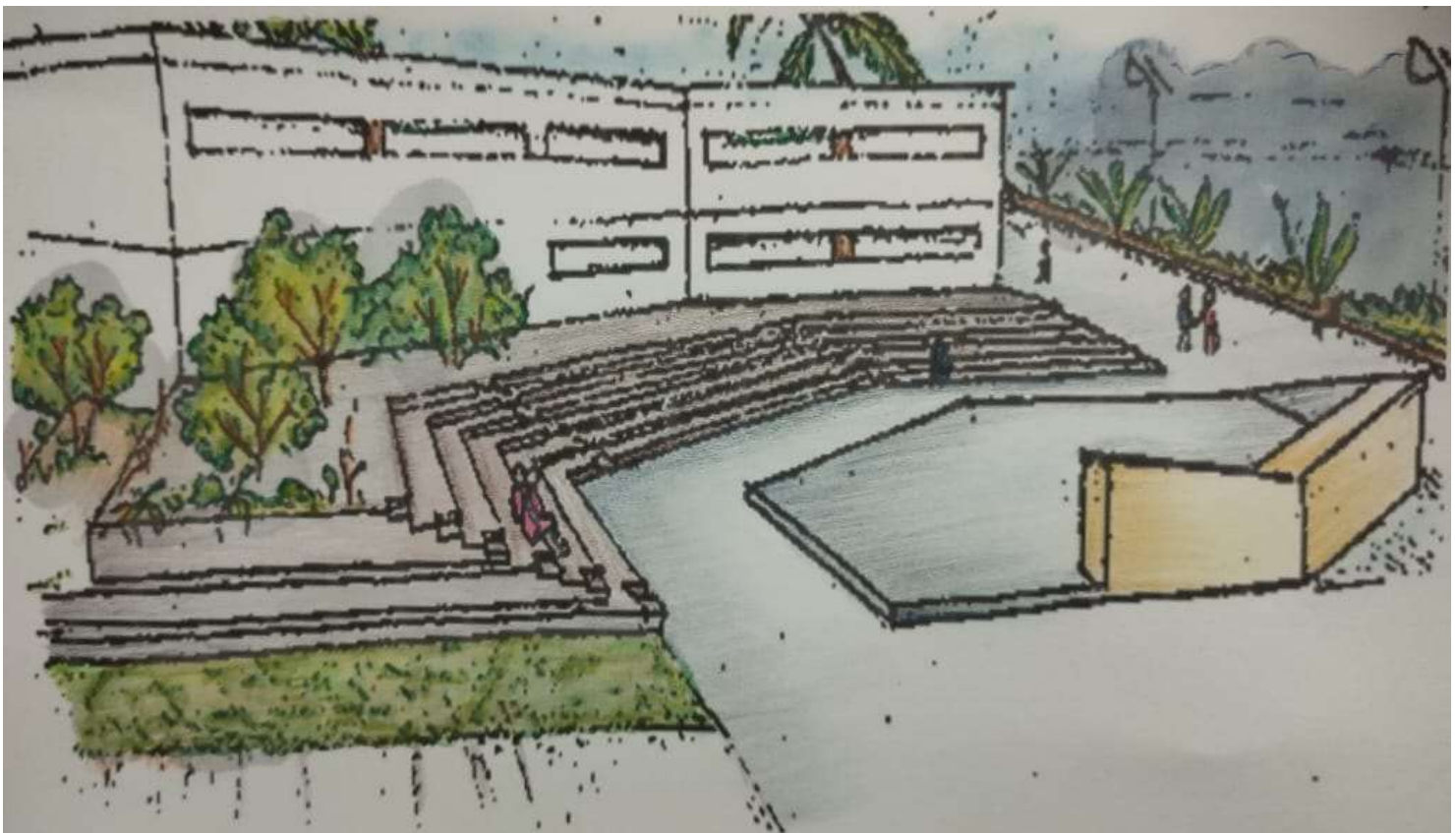


Table-chair arrangement at Clinton prison, America keeping the environment neat and disciplined.



Kitchen at Shrewsbury, UK unlike the kitchens in the prisons in India where all the utensils are on the floor creating unhygienic conditions.

OUTDOOR SPACES:



OUTDOOR SPACES:



Bibliography

"During my time in prison, I told myself that I wanted to be a part of the solution and not the problem."

-Michael Vick

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Annexure

"To be in prison so long, it's difficult to
remember exactly what you did to get there."
-Jack Henry Abbott

INTERVIEW WITH AN INMATE FROM YERWADA CENTRAL JAIL

Materials used for construction? - Stone, wood, M.S. for grill.

What happens when someone falls ill? - Inhouse hospital

In hospital total number of beds? - 40

Is the prison falling short/ getting crowded? - Yes

No. of prisoners/day or /week or /month? - 5

Who does the laundry? - Prisoners

Is there a 24 X7 doctor? - Yes

Schedule during the day?

u. nat. { 6 am - counting
open from 7:30 to 11:30 am. for daily morning work
11:30 - 3:30 pm - open
3:30 - 6:30 pm open.
6:30 - counting.

Who funds the jail? - Central / state govt.

Any block with multiple levels? - entrance block, watch tower

How many times is the counting done? - 2 times, 6 am. 6 pm.

Where is the parking for staff and visitors? - Outside the jail.

Nearby hospital? - Samsen hospital

Kitchen and dining? - Only kitchen

In one barrack how many? - Original capacity 60, present - 160

Are the people kept in the same barrack forever? - No

Is there a TV and radio in the barrack? All channels? - Yes, only Doordarshan

Can they use telephones? How often? - No

How is the bathing area? - Open

Separate/same entry/exit? - Same

Are there police stations inside? How many? - For every circle one police

Are they kept in the open all day? - Yes.

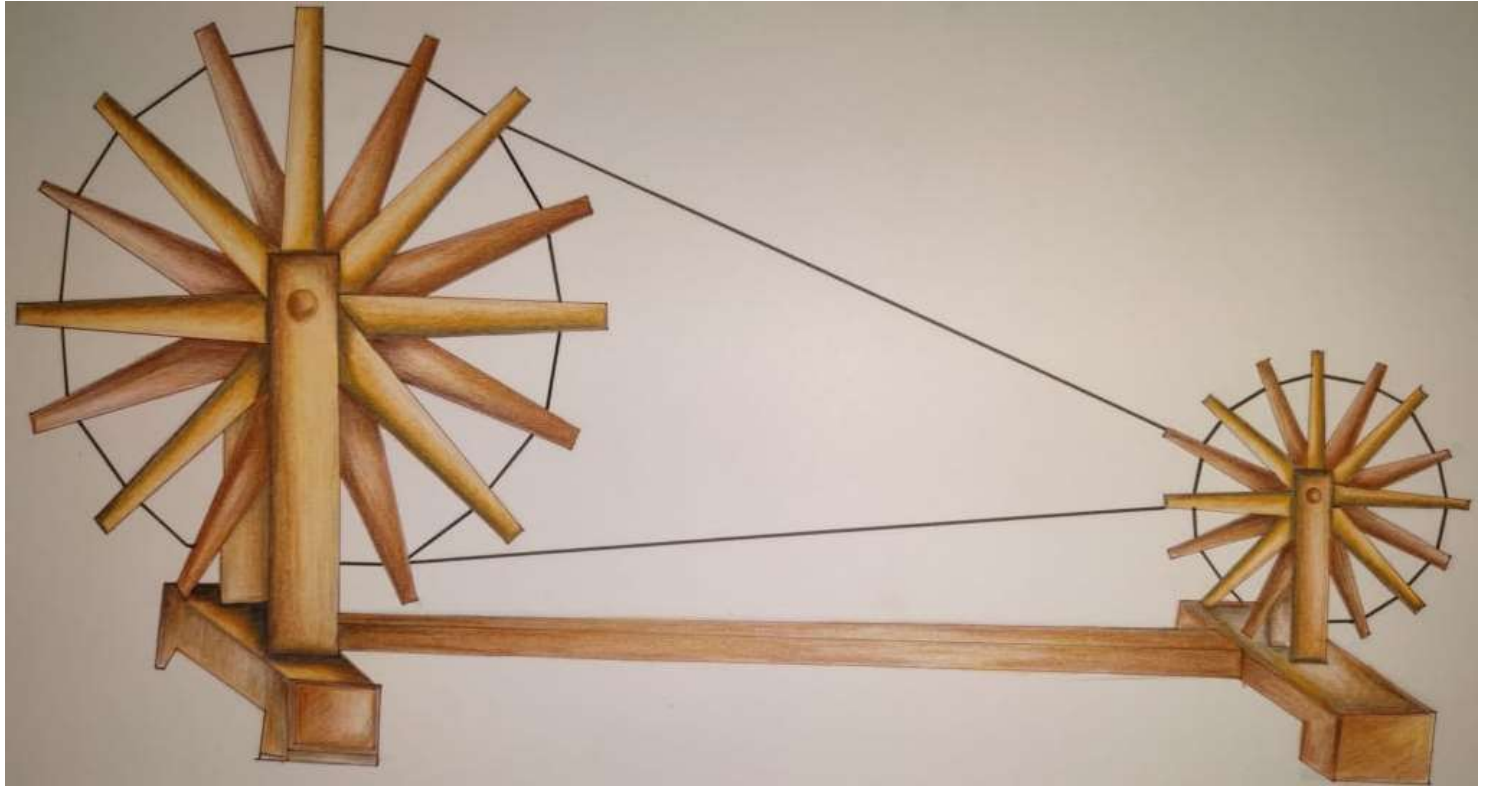
Are there lockers? - Yes.

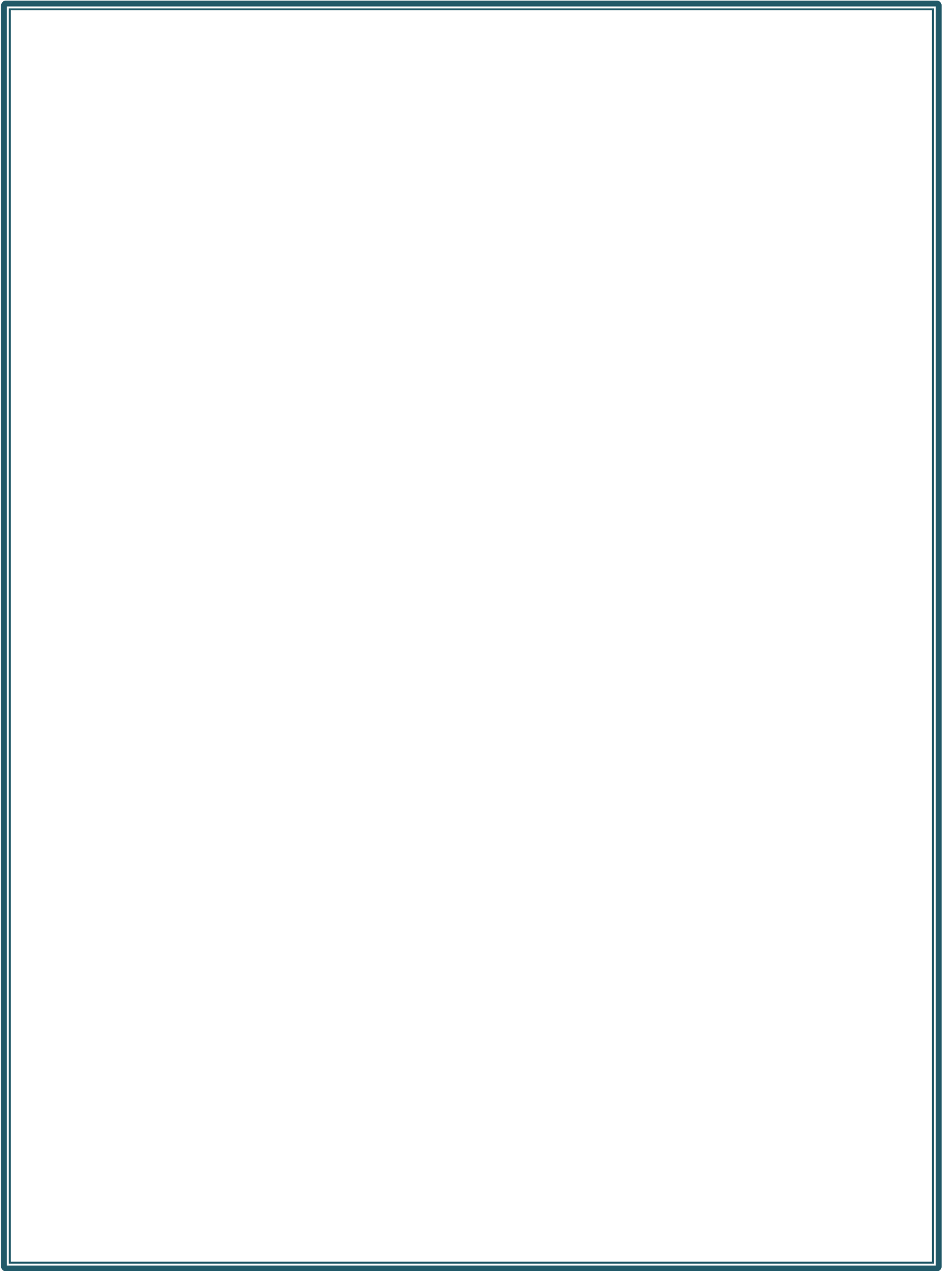
INTERVIEW WITH AN INMATE FROM YERWADA CENTRAL JAIL

- Are personal activities permitted? Painting, reading, drawing? - Yes
- Is the sentence reduced if good behavior is observed? - Yes
- What are the belongings that they are permitted to carry inside? - clothes, daily needs
- Are they allowed to socialize, make friends, interact? - Yes
- Is money allowed inside? If yes, then what is the limit? - yes, in the form of DP, Rs. 1500
- How much do they get paid per activity?
- What are the visiting hours and what is the limit? - in the morning 10-11:30, 3:30-5:30
- Who is allowed to visit? - only blood relation / lawyer
- How many minutes does the meet last for? - 5 min
- During the meeting are they left alone or are there guards? - Yes / but 1 guard in room
- Are there foreigners? How many? - Yes
- Are they given special treatment? - No
- Difference between activities in male and female jail?
- Are there any lectures/ interactive sessions by eminent personalities? - Yes
- Is there counselling? If yes, for whom? How often? - Yes
- Are festivals celebrated? How? - Yes, programs
- Do people pray? - Yes
- Is there any statue to pray to? - Yes
- Is outside food or home food allowed? - No
- Is there a canteen? - No canteen, a store.
- What are the products available? - daily needs, eatables, snacks
- How much do they cost? Same or cheaper in cost? - 1.5 costlier than outside
- Is there a juvenile prison? - Yes
- Are there any mentally retarded, blind, deaf, dumb persons? - Yes.
- What is the food? - Chapatis, Dal, Rice & vegetable.
- Is there any furniture? - No not in the cell.
- Are there mirrors in the barracks/ cells/ bathrooms? - No.
- Where is the staff accommodation? - outside.
- Where do they eat? - carry their food.
- At what time does the shift change?
- What are the recreational spaces?
- Is there a gym arrangement? - No
- Have there been any escapes? If yes, how? - Yes
- Sufficient light and ventilation? - Yes
- What happens during winter? - Additional blanket
- Are there any CCTV's? How many? - Yes.

Design Concept and Solution

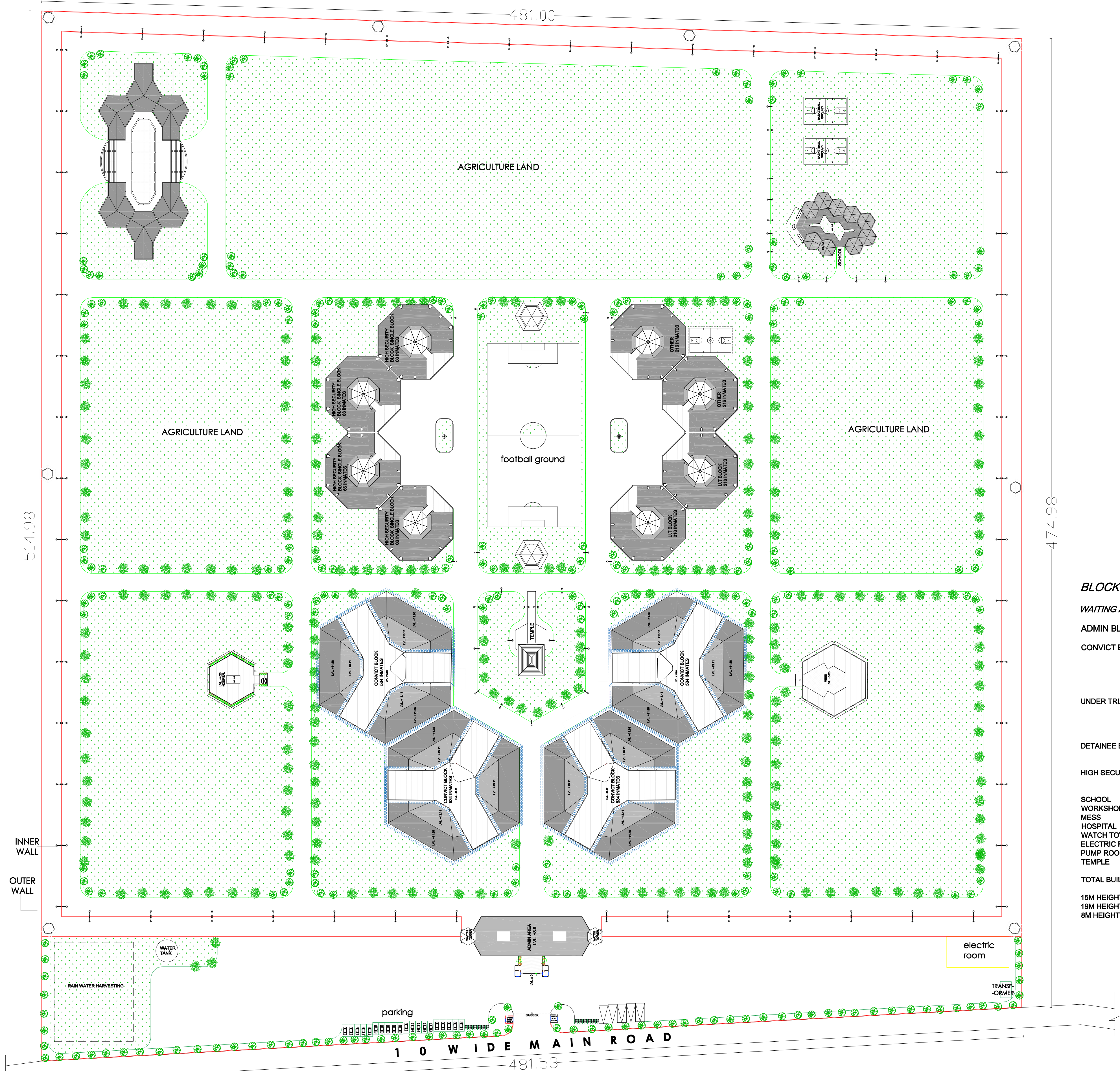
"Responsibility prevents crimes."
~Edmund Burke





Thank You

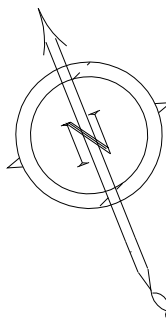
BABU BANARASI
DAS UNIVERSITY,
LUCKNOW



BLOCK DETAIL

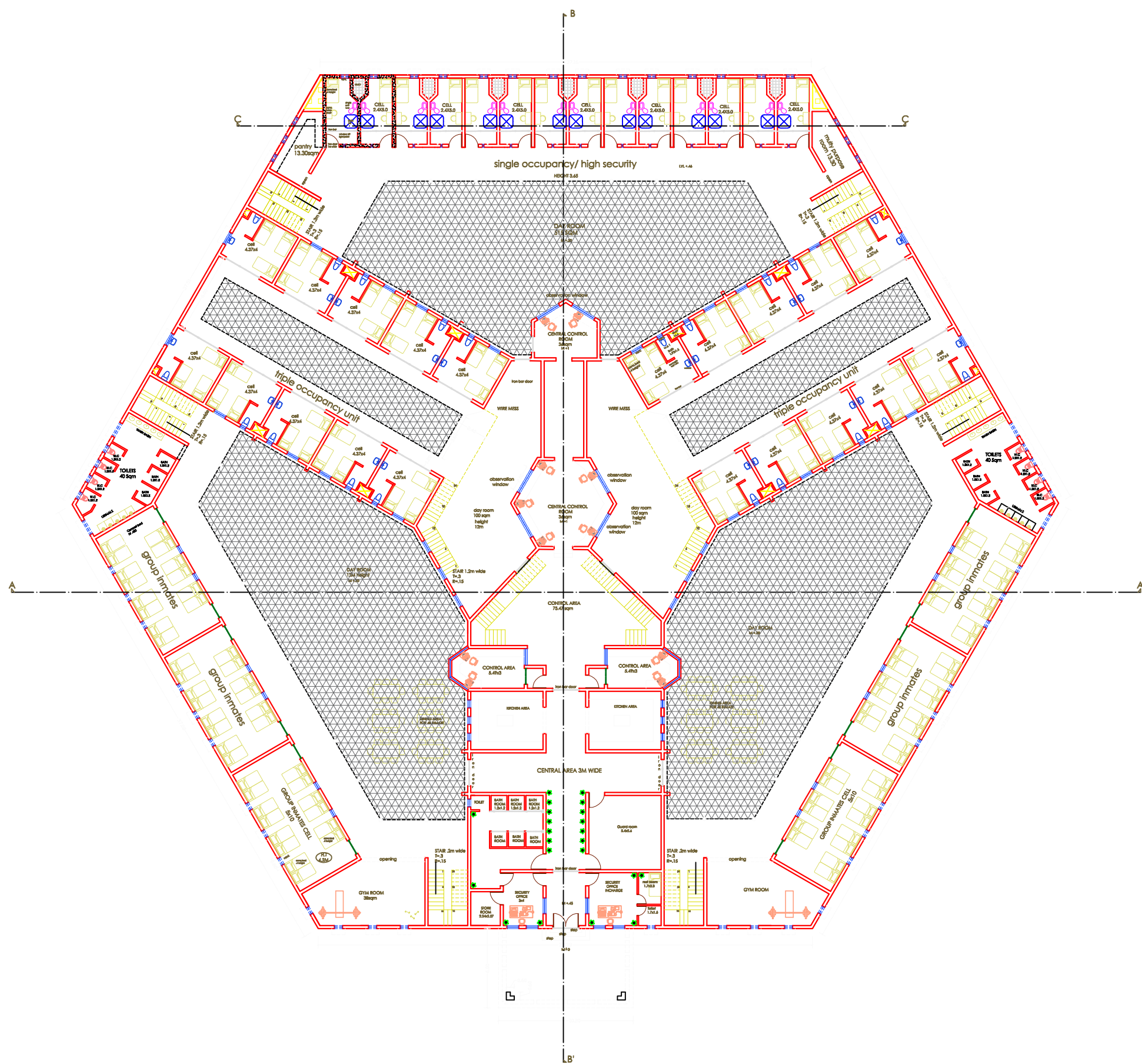
WAITING AREA	-GROUND FLOOR -221.7 sqm	visitor waiting area/checking
	FIRST FLOOR - 221 .7 sqm	police staff accommodation
ADMIN BLOCK AREA	-GROUND FLOOR -1113 sqm	
	FIRST FLOOR -1143sqm	
CONVICT BLOCK ALL	- GROUND FLOOR -2633+2633 =5266sqm	
	FIRST FLOOR - 2633+2633 =5266sqm	
	SECOND FLOOR - 3611+3611 =7222sqm	
	THIRD FLOOR -1370+1370 =2740sqm	
	MUMTY -34 sqm	
UNDER TRIAL BLOCK ALL	- GROUND FLOOR -2633+2633+1682 =6948SQM	
	FIRST FLOOR - 2633+2633 +1682=6948SQM	
	SECOND FLOOR - 3611+3611+2190 =9412SQM	
	THIRD FLOOR -1370+1370 =2740SQM	
	MUMTY -34 SQM	
DETAINEE BLOCK	- GROUND FLOOR -1174 sqm	
	FIRST FLOOR - 1174 sqm	
	SECOND FLOOR -2190 sqm	
HIGH SECURITY BLOCK	- GROUND FLOOR -3481 sqm	
	FIRST FLOOR -3481 sqm	
	SECOND FLOOR -4497 sqm	
SCHOOL	-GROUND FLOOR -756 sqm	
WORKSHOP	-GROUND FLOOR -1890 sqm	
MESS	-GROUND FLOOR -593 sqm	
HOSPITAL	- GROUND FLOOR -383 sqm	
WATCH TOWER	- GROUND FLOOR -253 sqm	
ELECTRIC ROOM	- 28 sqm	
PUMP ROOM	- 30 sqm	
TEMPLE	- 338 sqm	
TOTAL BUILDUP AREA	-69566 sqm	
15M HEIGHT WALL .75m WIDE BASE		
19M HEIGHT WATCH TOWER		
8M HEIGHT OUTER FENCES		

NORTH

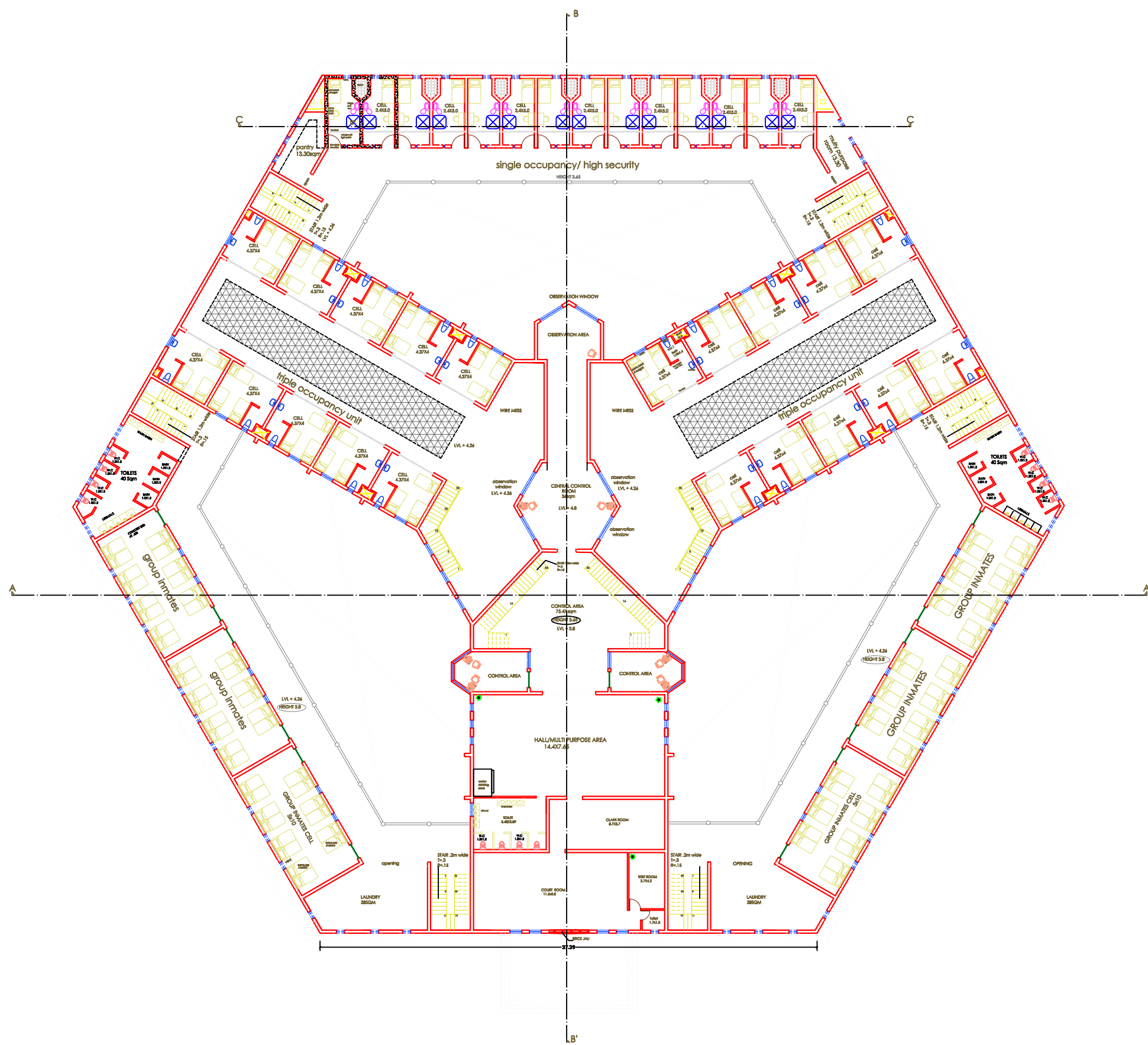


SITE PLAN

GUIDED BY- Ar. PUJA VERMA
HITESH KUMAR
ARCH. DESIGN -X
B.ARCH, AR-5.3
2019-2020
B.B.D.U.



GROUND FLOOR PLAN

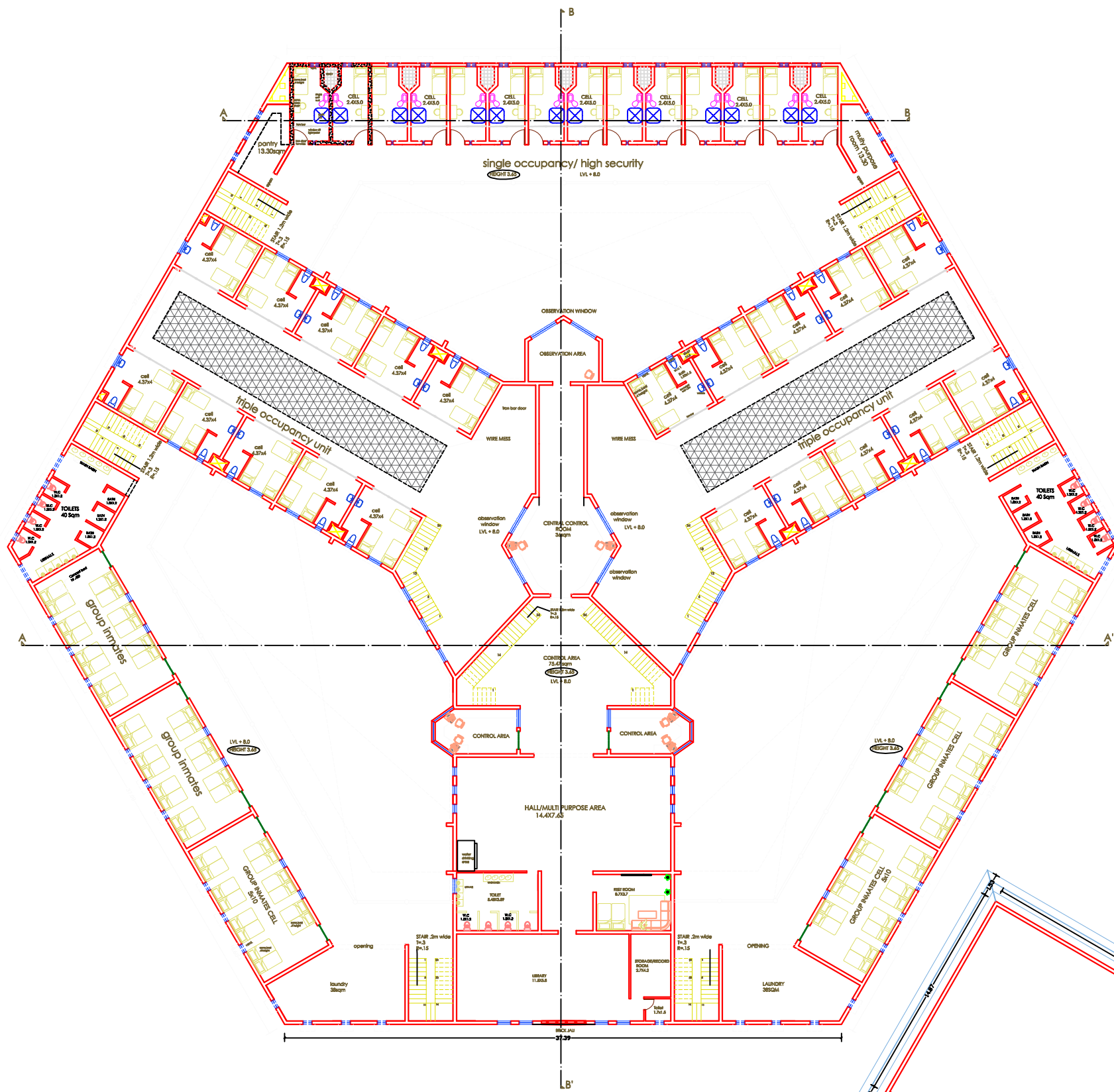


FIRST FLOOR PLAN

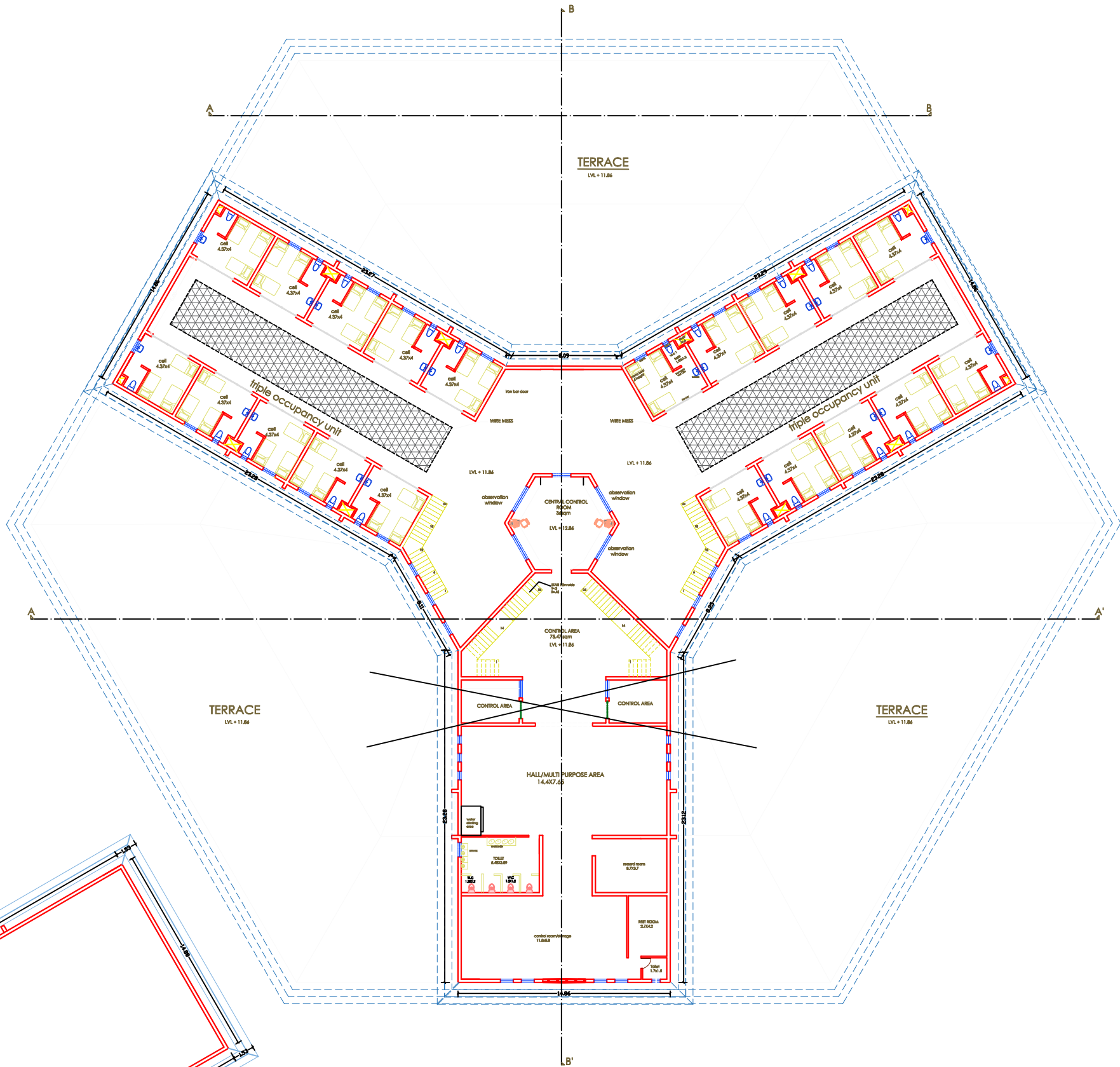
UNDER TRIAL BLOCK

NOTE - ALL DIMENSIONS ARE IN M SCALE - 1: 3

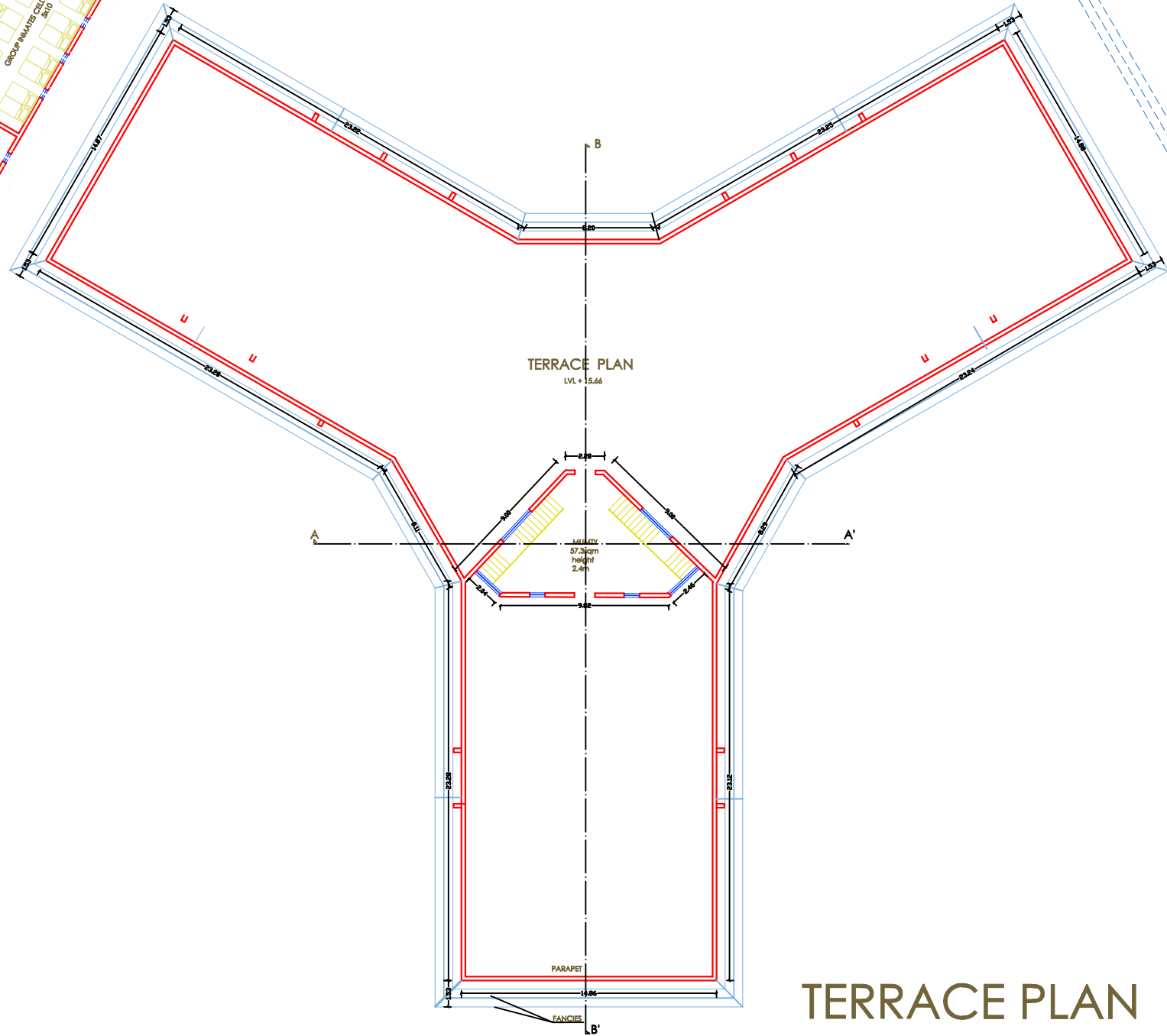
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SECOND FLOOR PLAN



THIRD FLOOR PLAN

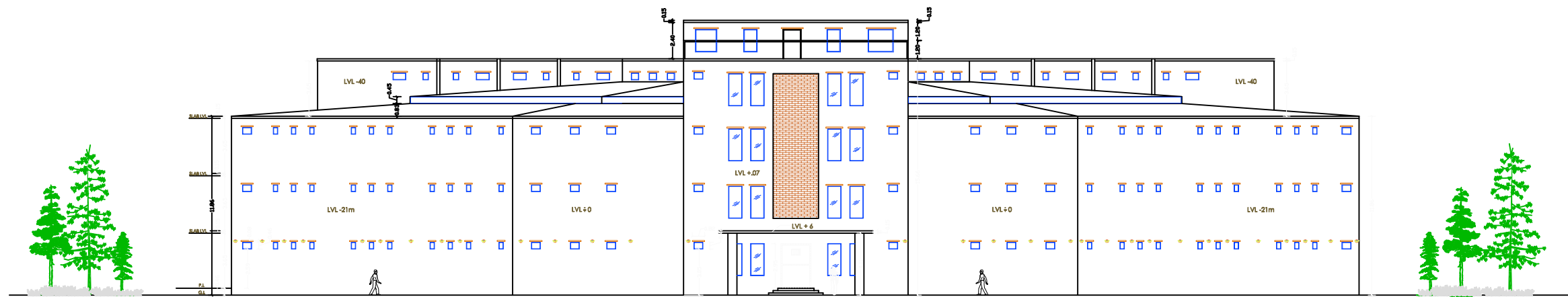


TERRACE PLAN

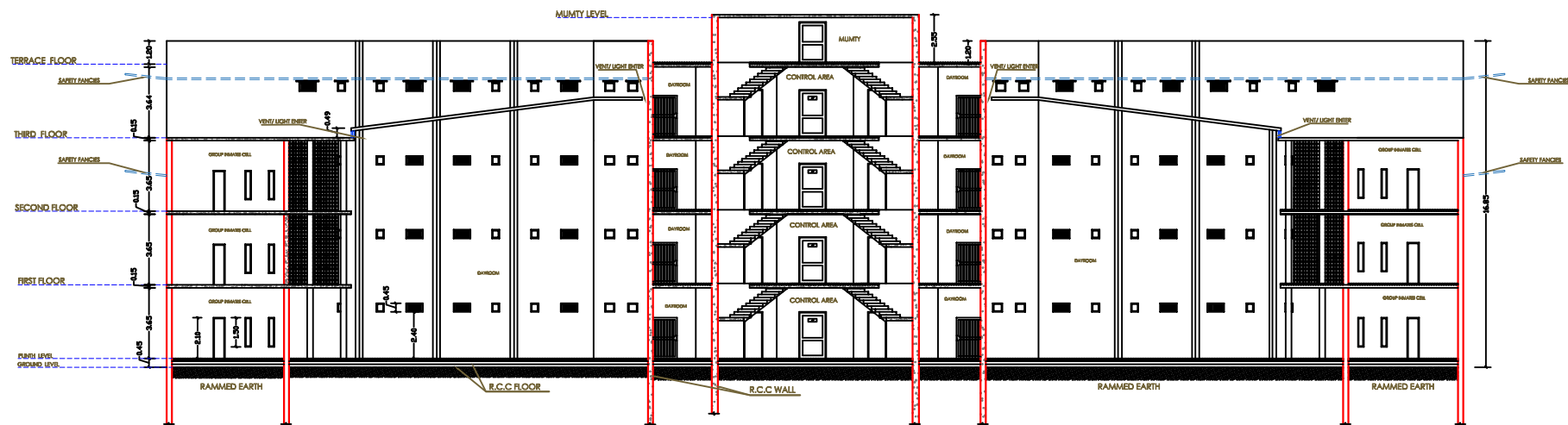
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NOTE - ALL DIMENSIONS ARE IN M SCALE - 1 : 3

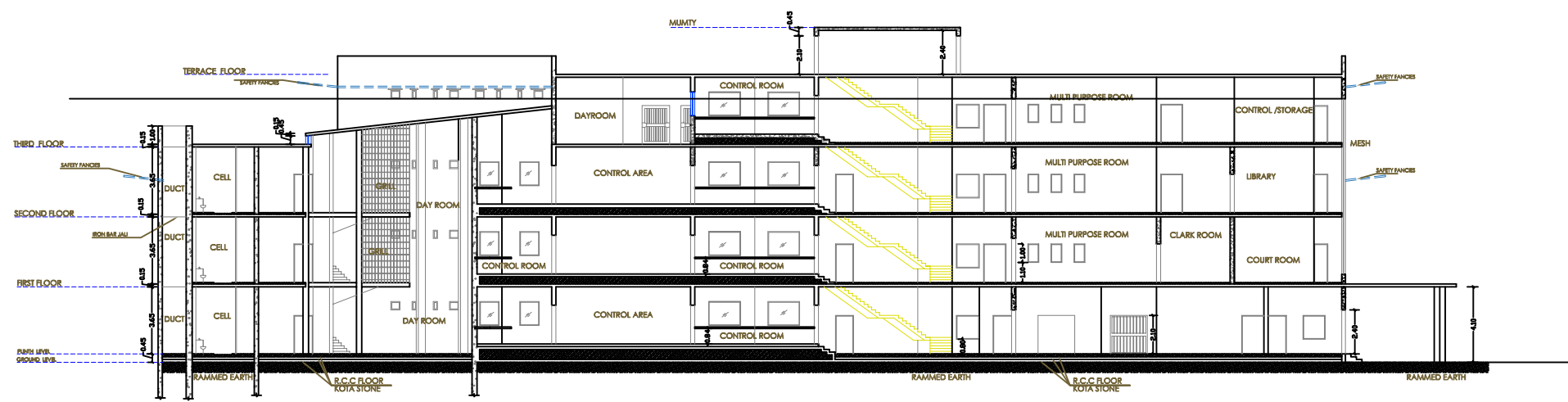
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FRONT LELEVATION



SECTION AA'



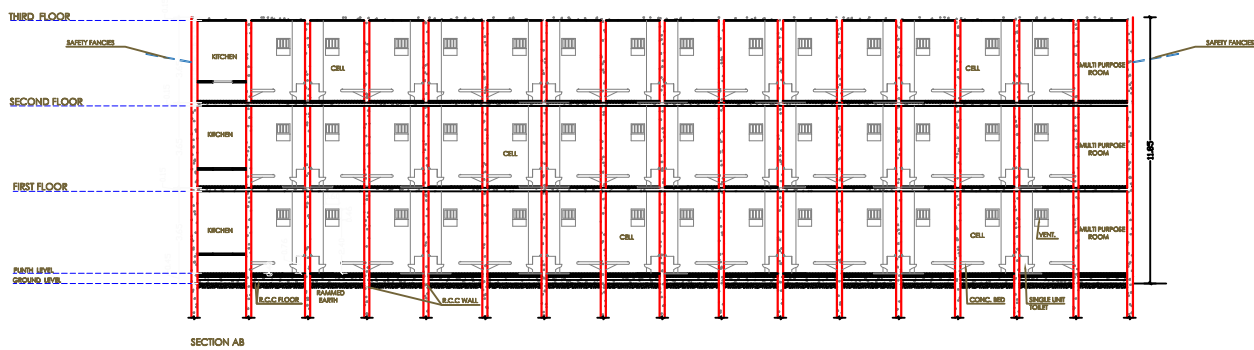
SECTION BB'

BLOCK DETAIL

UNDER TRIAL BLOCK - GROUND FLOOR -
(ALL BLOCKS) 2633+2633+1682 =6948SQ.M.

FIRST FLOOR -
- 2633+2633 +1682=6948SQ.M.
SECOND FLOOR -
- 3611+3611+2190 =9412SQ.M.
THIRD FLOOR -
- 1370+1370 =2740SQ.M.
MUMTY -
- 34 SQ.M.

NO. OF INMATES - 480 + 480 = 960 INMATES
TOTAL BUILDING HEIGHT -11.86 M



SECTION CC'

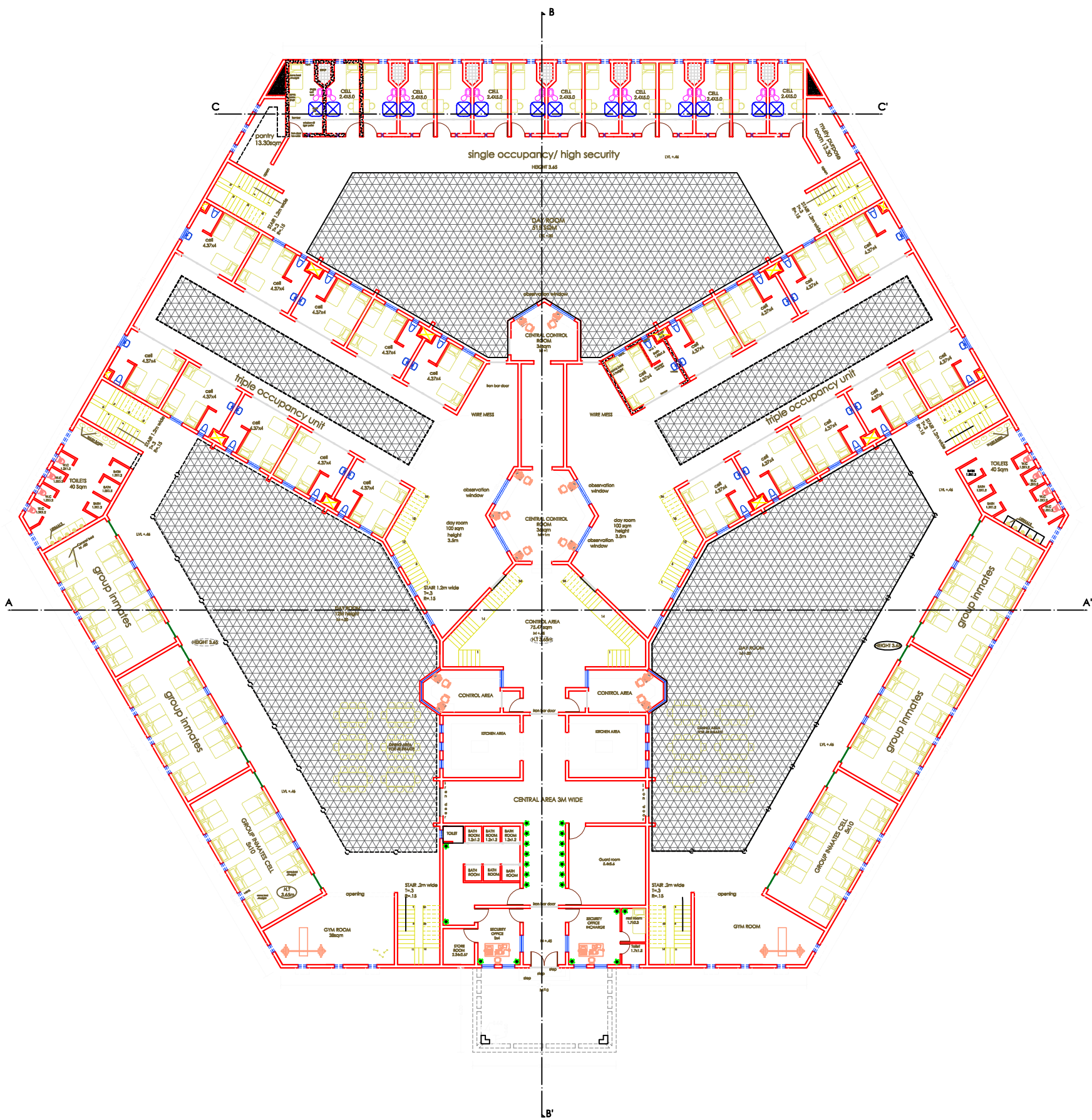
UNDER TRIAL BLOCK

NOTE - ALL DIMENSIONS ARE IN M SCALE - 1: 3

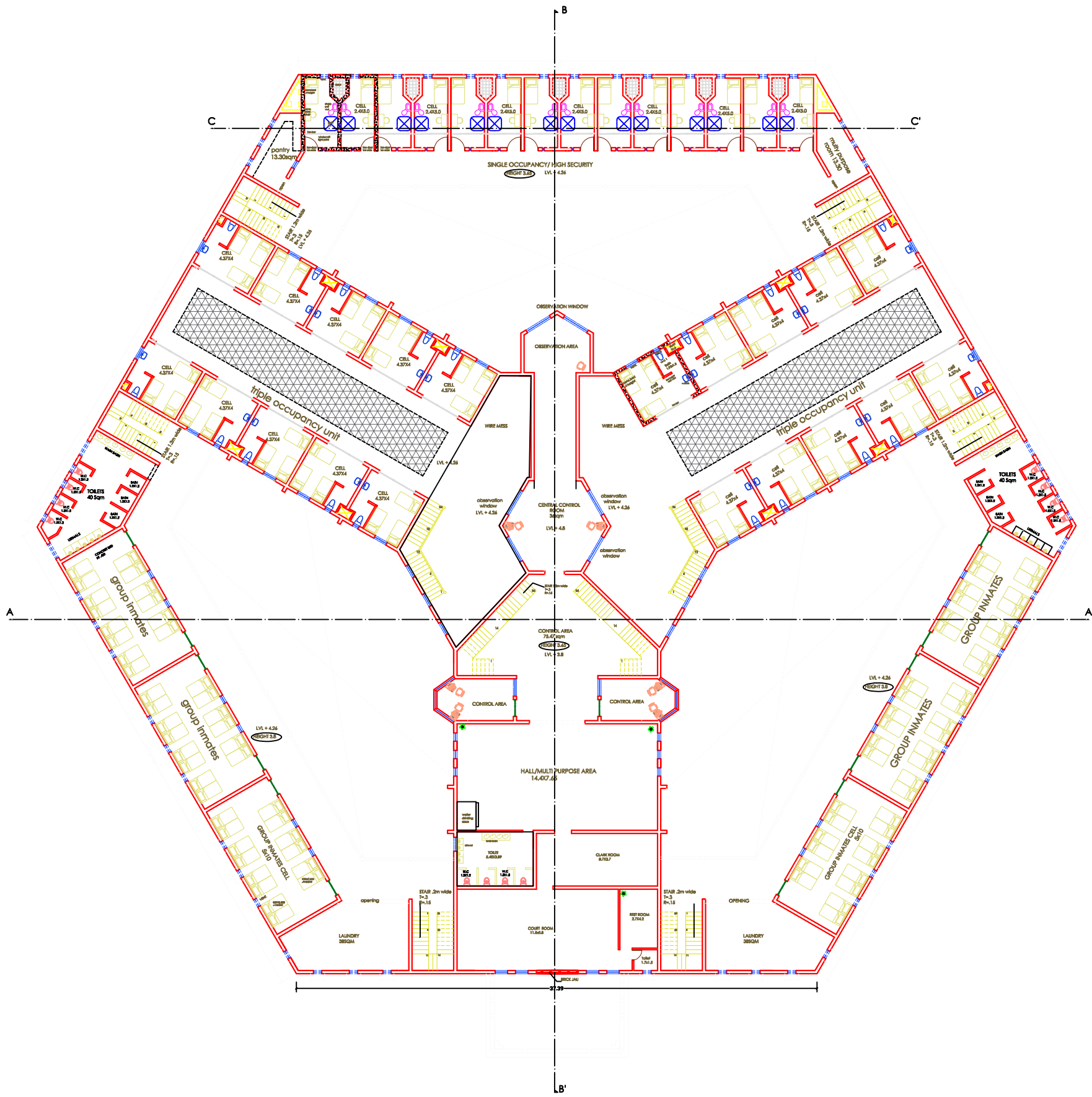
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GROUND FLOOR PLAN

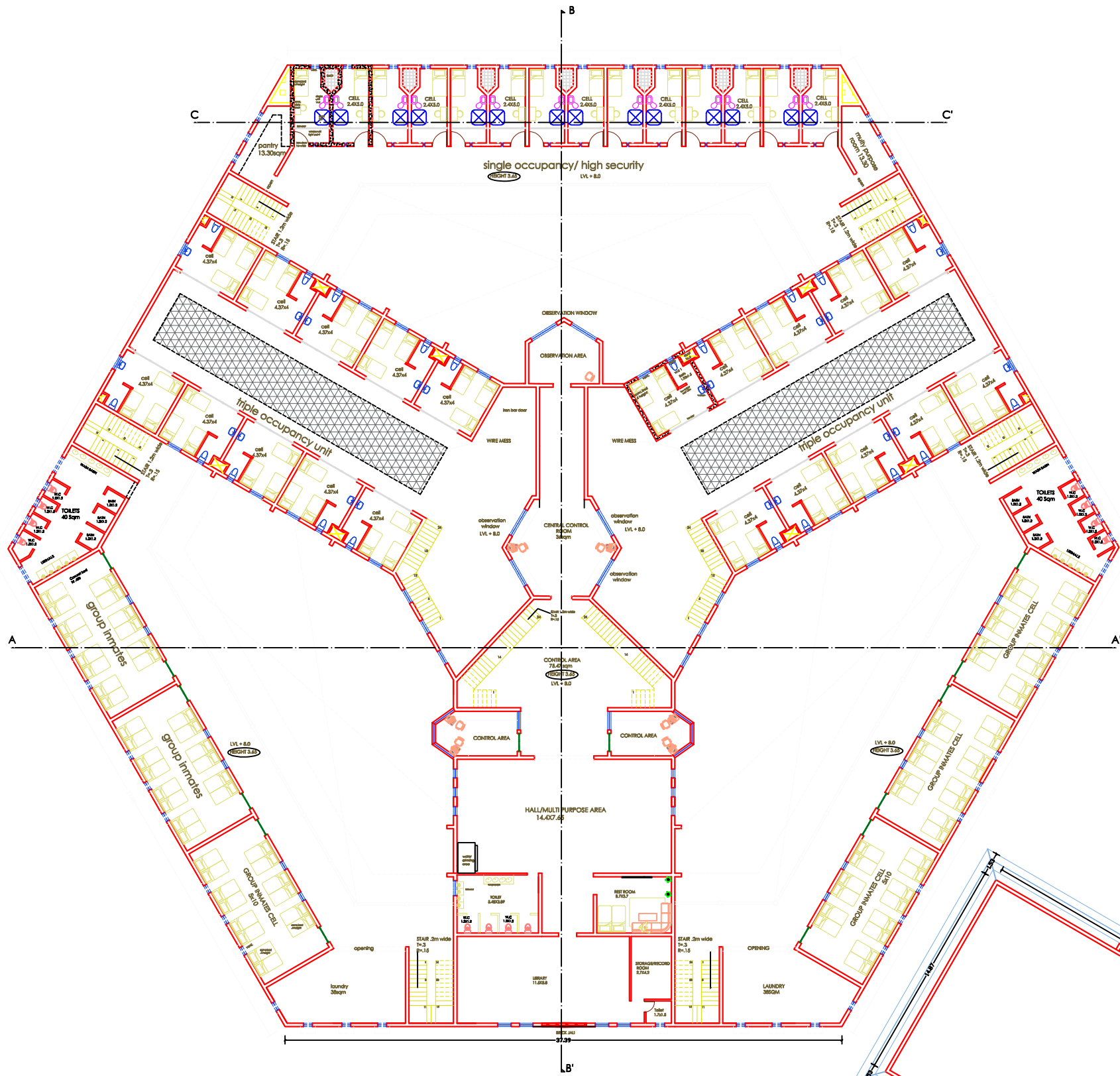


FIRST FLOOR PLAN

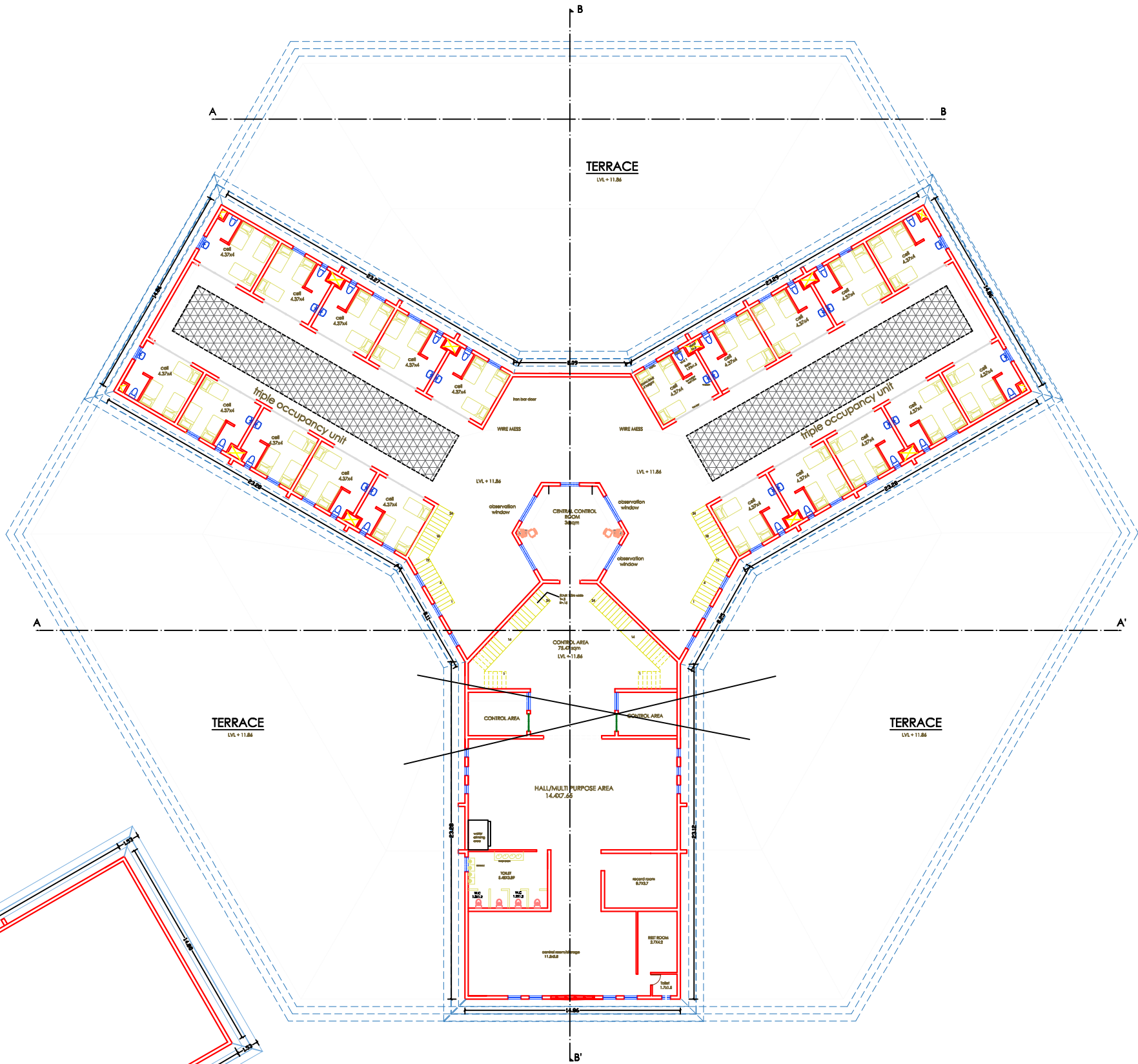
CONVICT BLOCK

NOTE - ALL DIMENSIONS ARE IN M SCALE - 1: 3

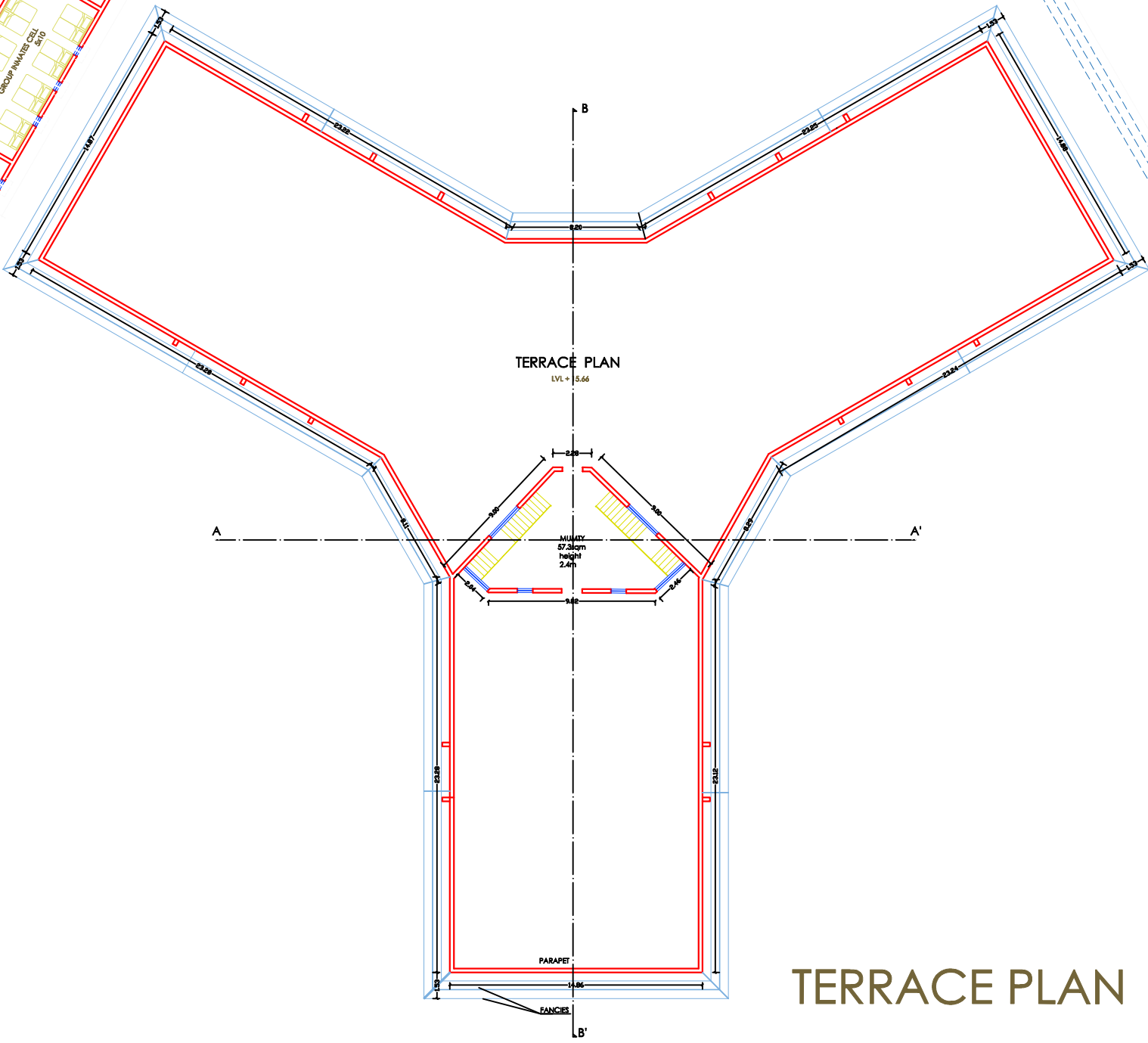
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SECOND FLOOR PLAN



THIRD FLOOR PLAN

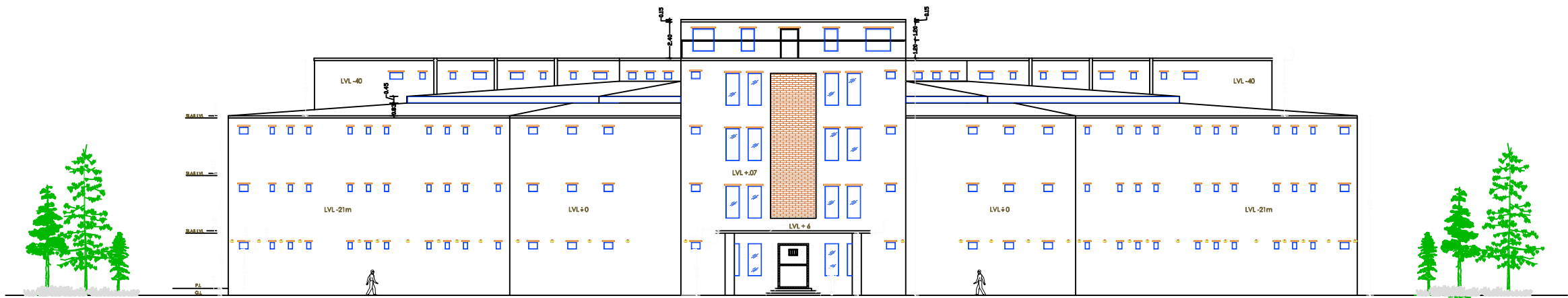


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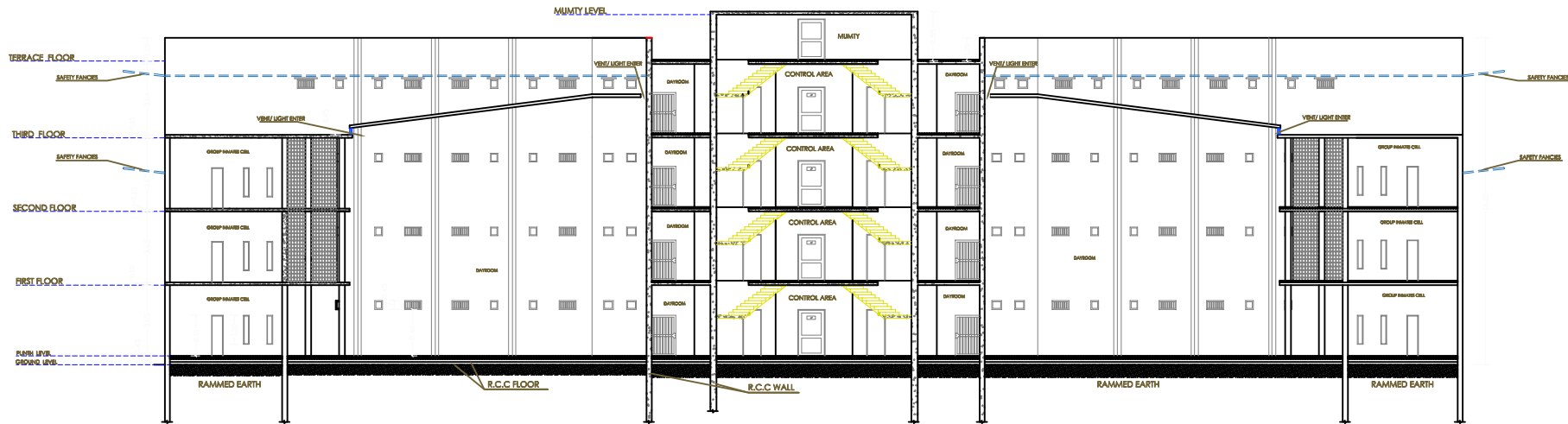
CONVICT BLOCK

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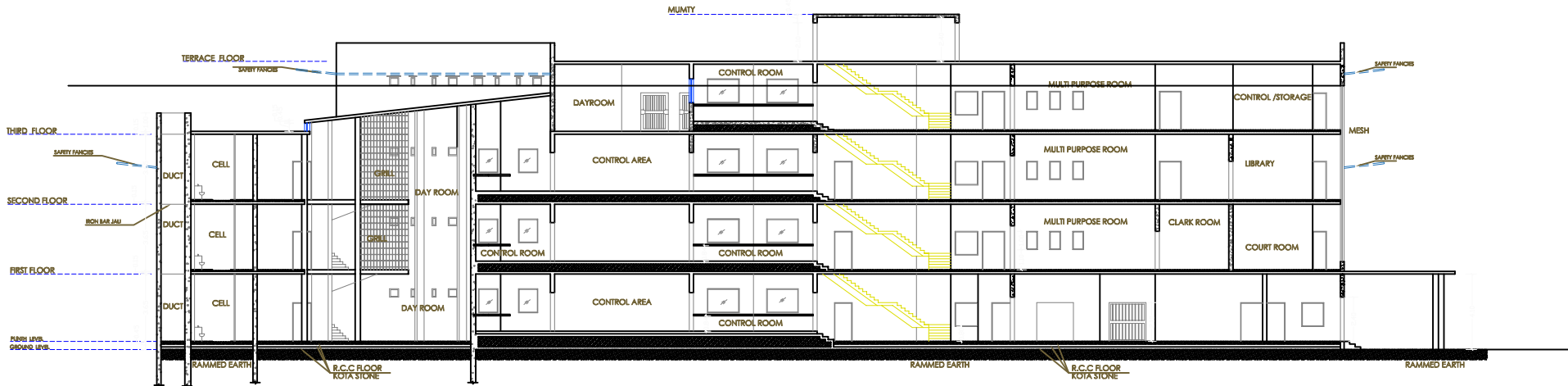
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FRONT LELEVATION



SECTION AA'



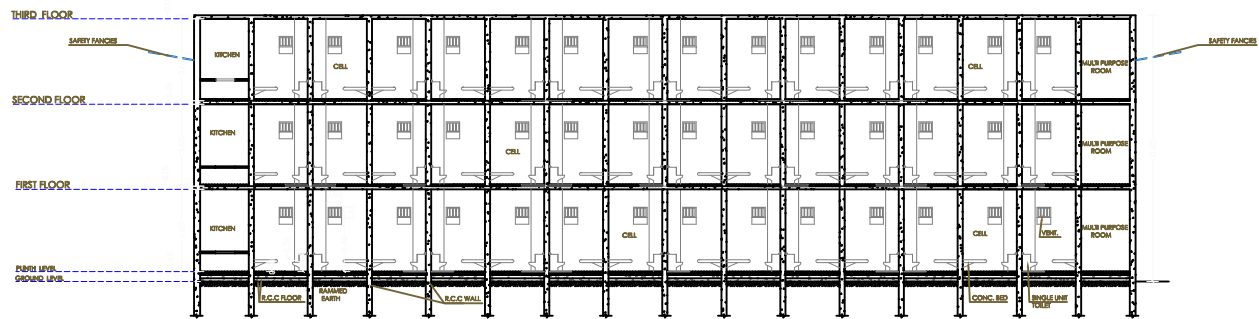
SECTION BB'

BLOCK DETAIL

CONVICT BLOCK - GROUND FLOOR -
(ALL BLOCKS) 2633+2633 =5266 sq.m.

FIRST FLOOR -
- 2633+2633 =5266 sq.m.
SECOND FLOOR -
- 3611+3611 =7222 sq.m.
THIRD FLOOR -
- 1370+1370 =2740 sq.m.
MUMTY -
- 34 SQ.M.

NO. OF INMATES - 400 + 400 = 800 INMATES
TOTAL BUILDING HEIGHT -11.86 M

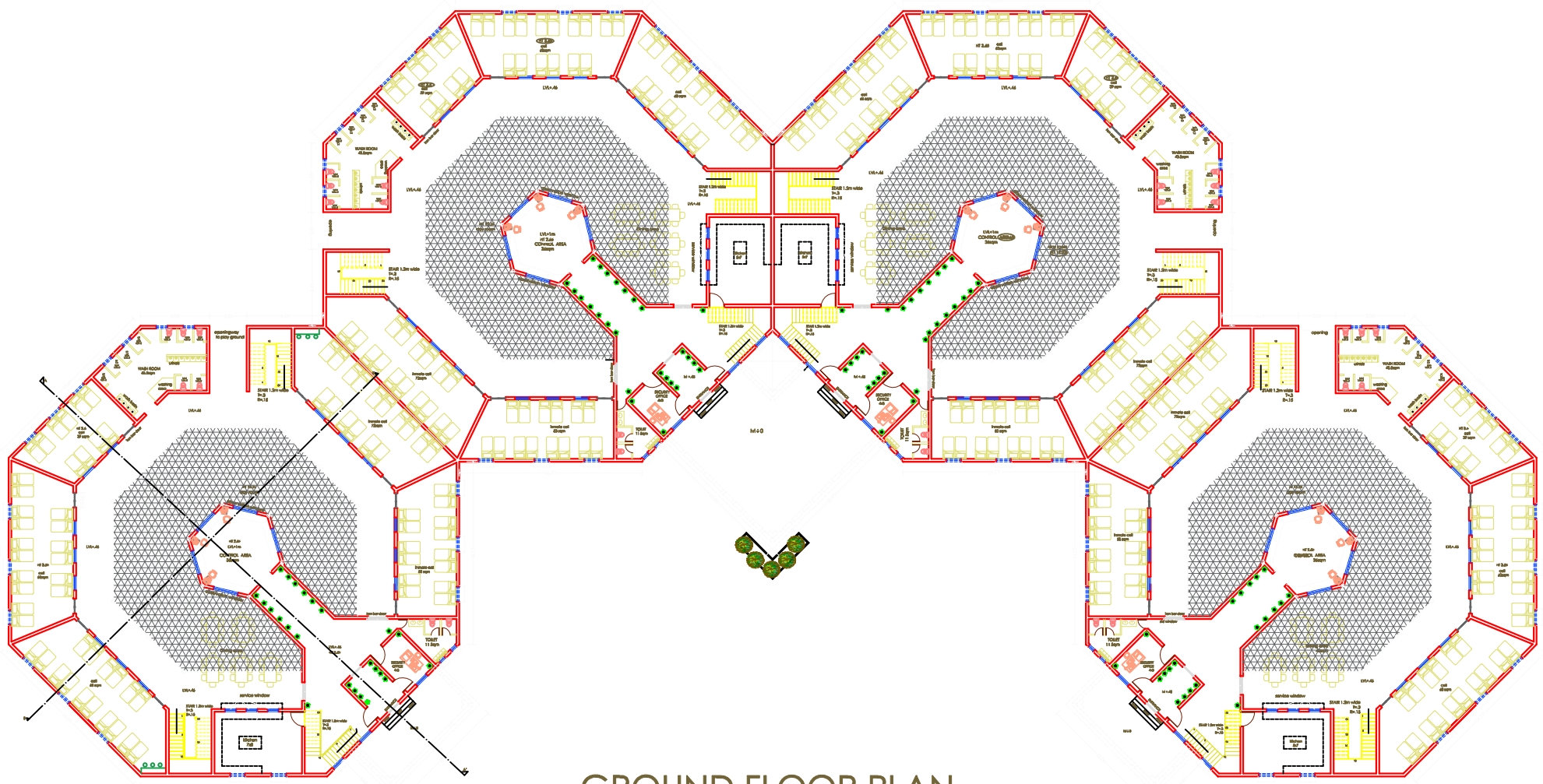


SECTION CC'

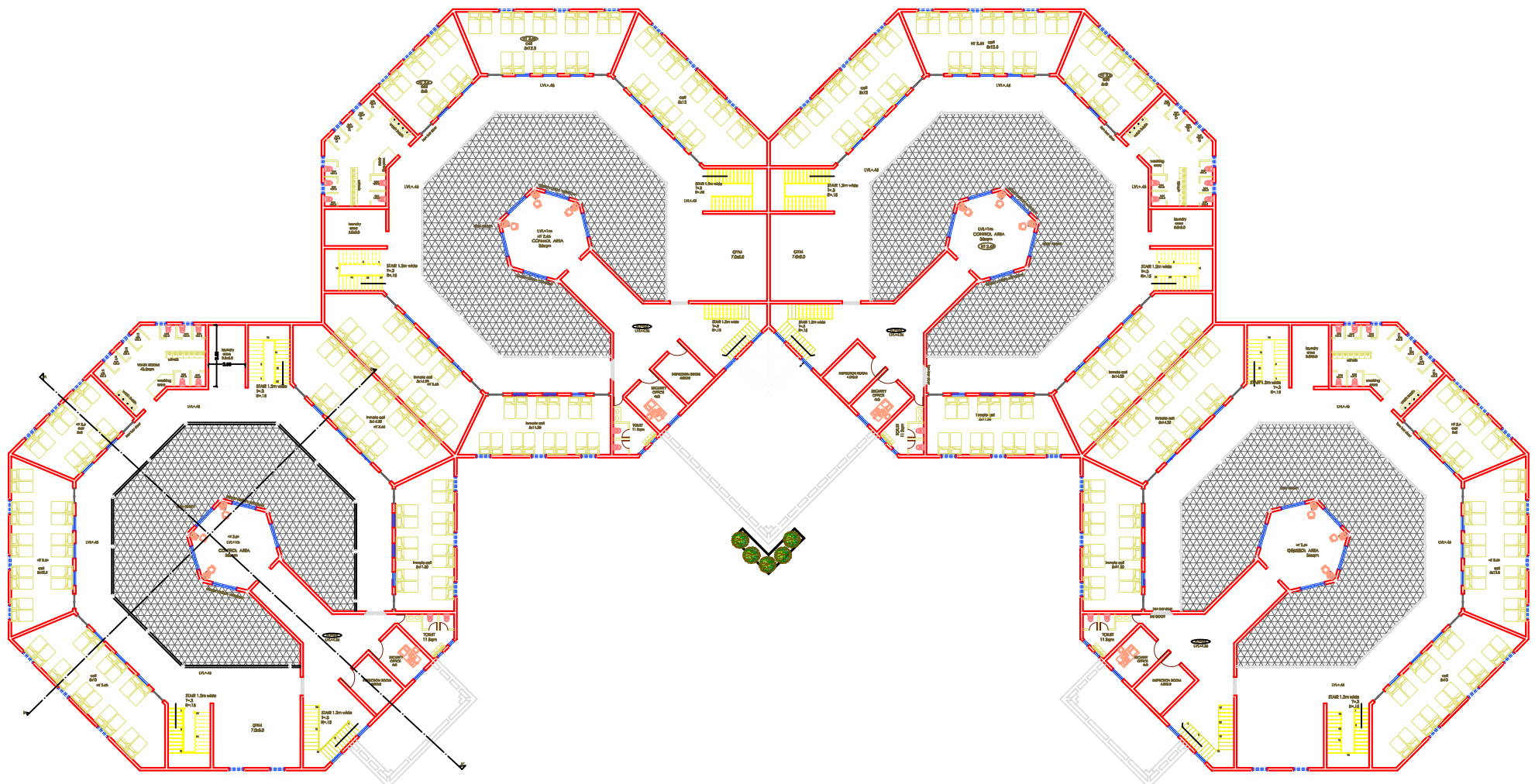
CONVICT BLOCK

NOTE - ALL DIMENSIONS ARE IN M SCALE - 1: 3

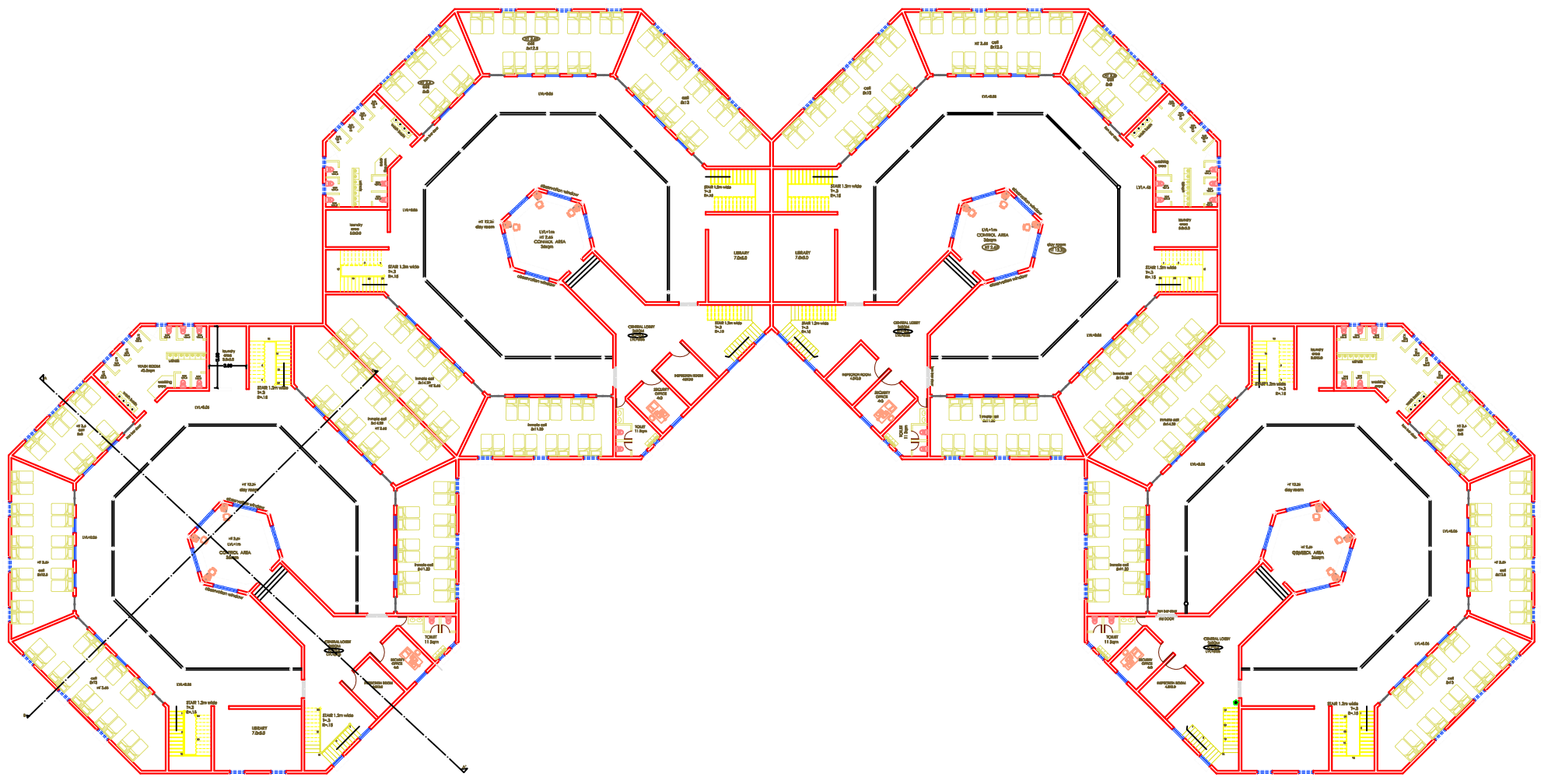
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GROUND FLOOR PLAN



FIRST FLOOR PLAN

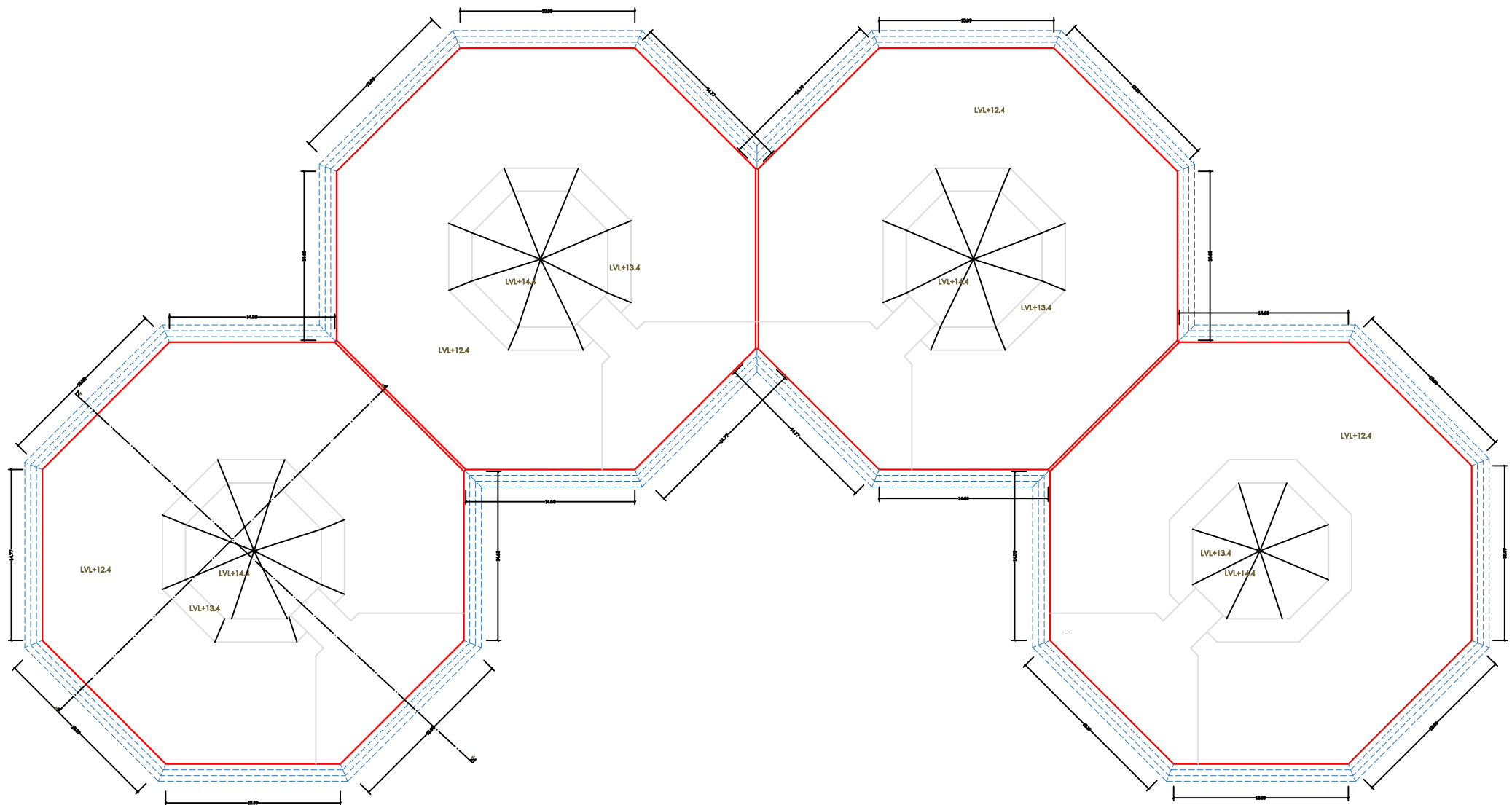


SECOND FLOOR PLAN

DETAIN & OTHERS BLOCK

NOTE - ALL DIMENSIONS ARE IN M SCALE - 1 : 5

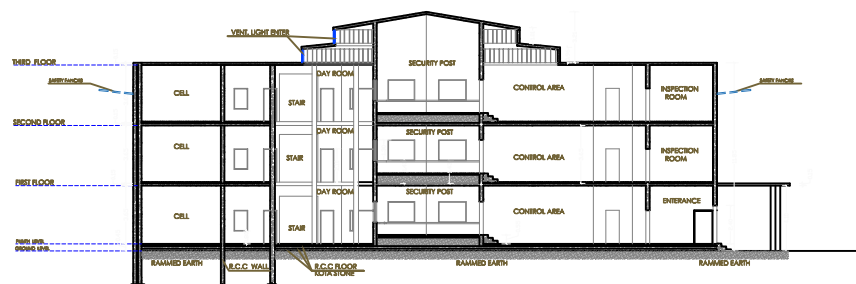
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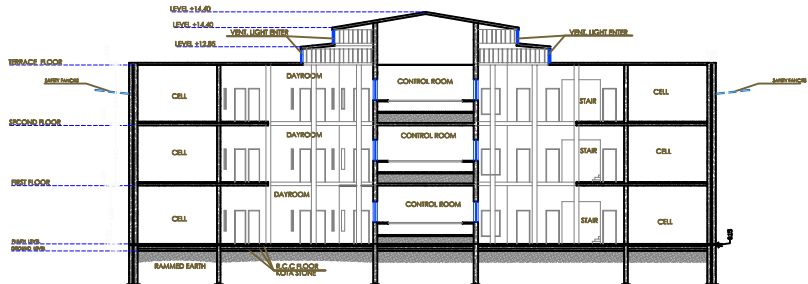
SECOND FLOOR PLAN



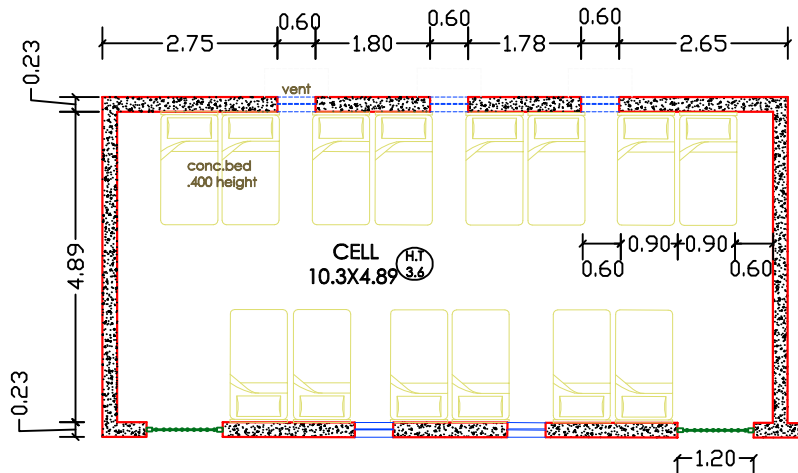
FRONT ELIVATION



SECTION AA'



SECTION BB'



GROUP INMATES CELL

BLOCK DETAIL

DETAIN BLOCK

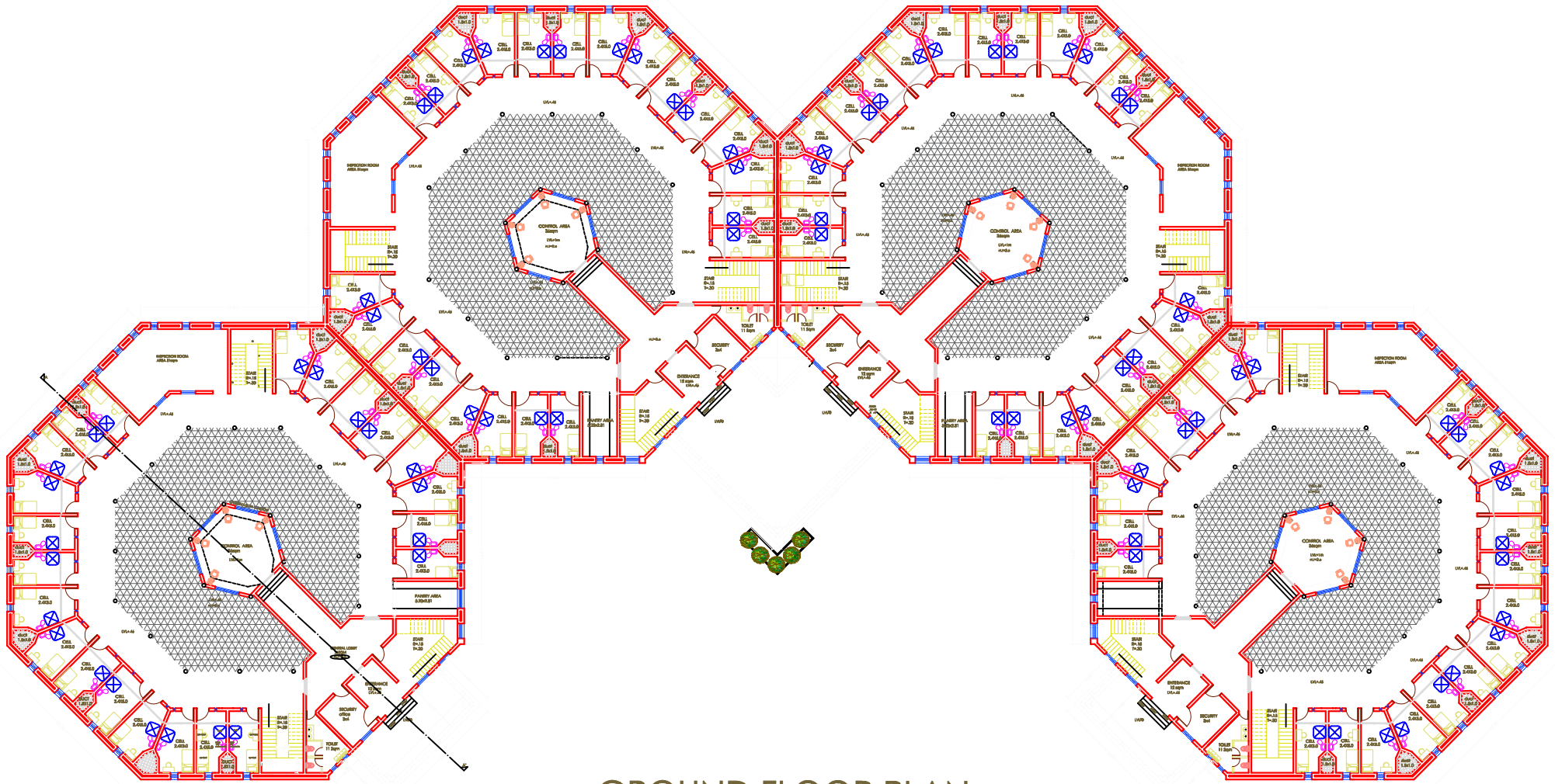
GROUND FLOOR - 1174 sq.m.
FIRST FLOOR - 1174 sq.m.
SECOND FLOOR - 2190 sq.m.

TOTAL BUILDING HEIGHT -11.86 M

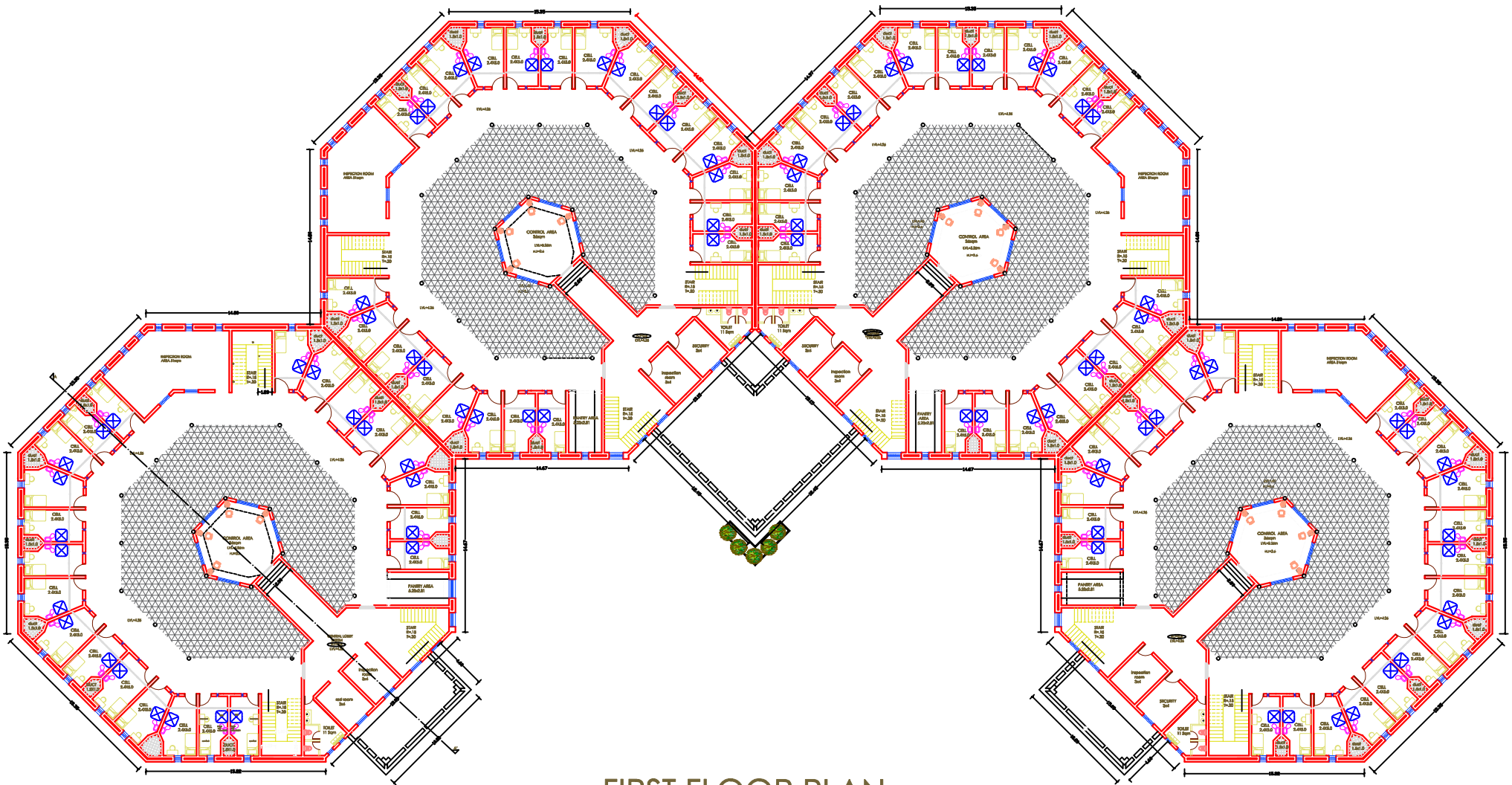
DETAIN & OTHERS BLOCK

HITESH KUMAR	DATE	SHEET NO.
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ARCHITECTURAL DESIGN-X	SIGN	REMARK
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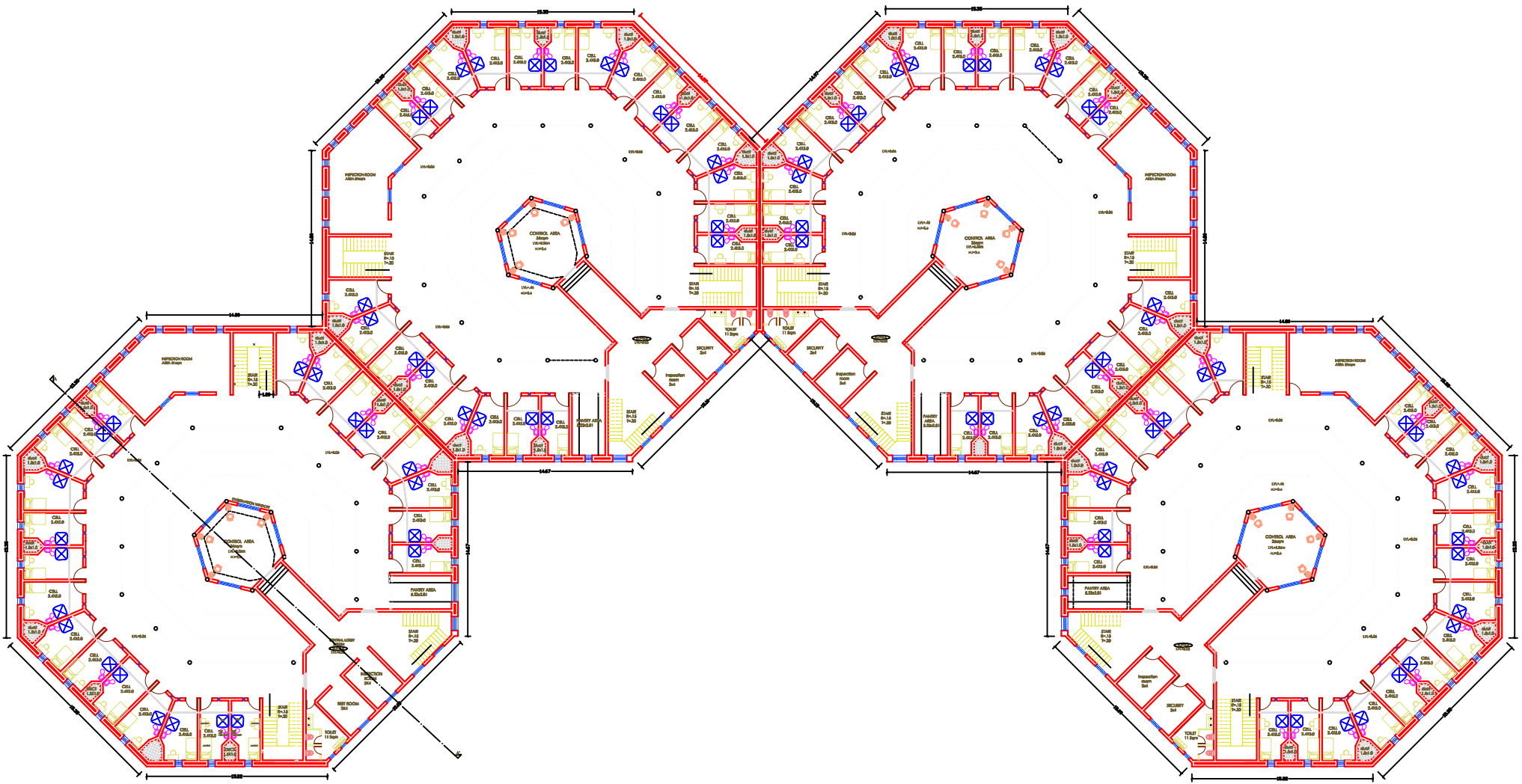
NOTE - ALL DIMENSIONS ARE IN M SCALE - 1: 5



GROUND FLOOR PLAN



FIRST FLOOR PLAN

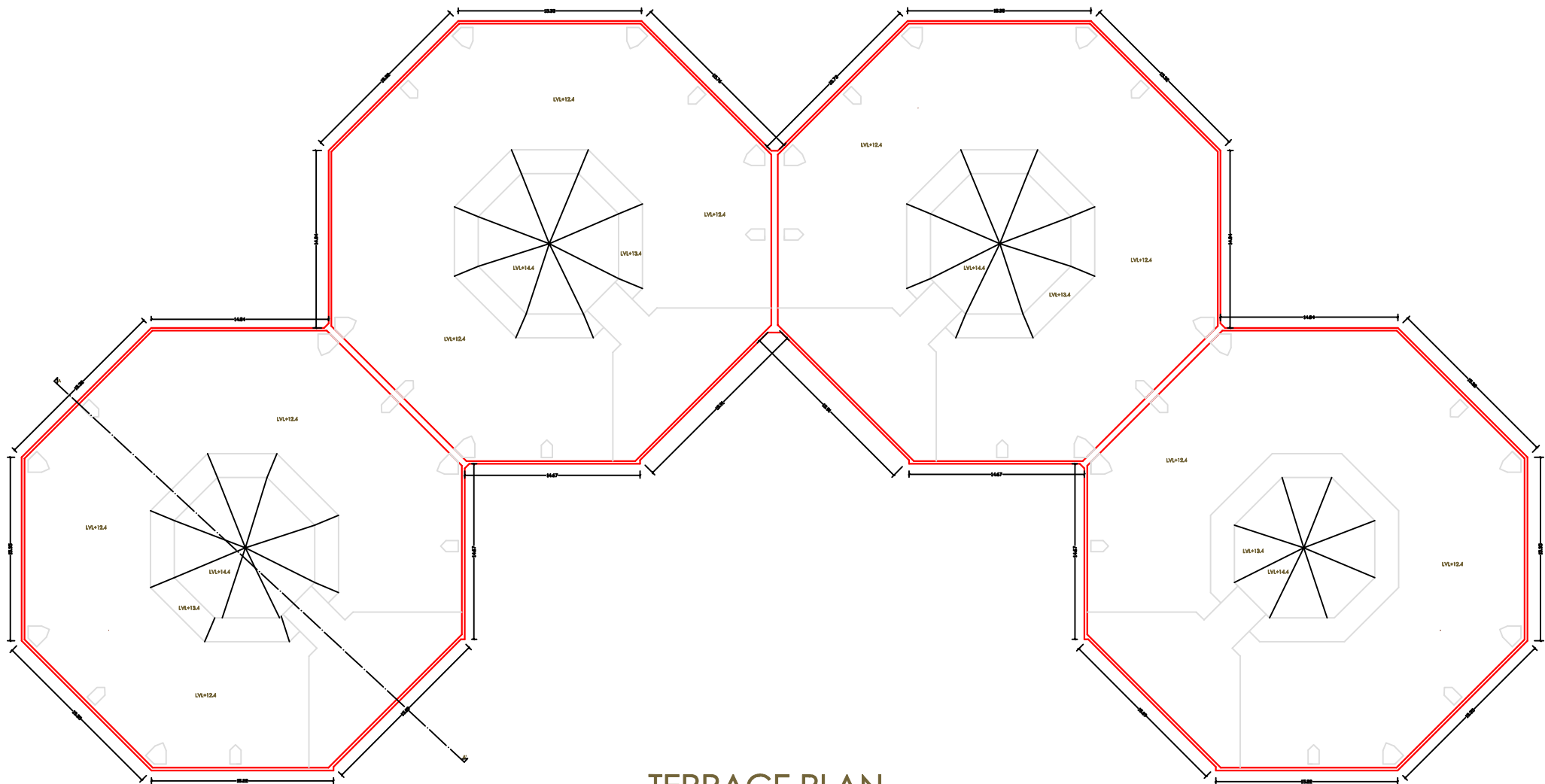


SECOND FLOOR PLAN

HIGH SECURITY BLOCK

NOTE - ALL DIMENSIONS ARE IN M SCALE - 1 : 5

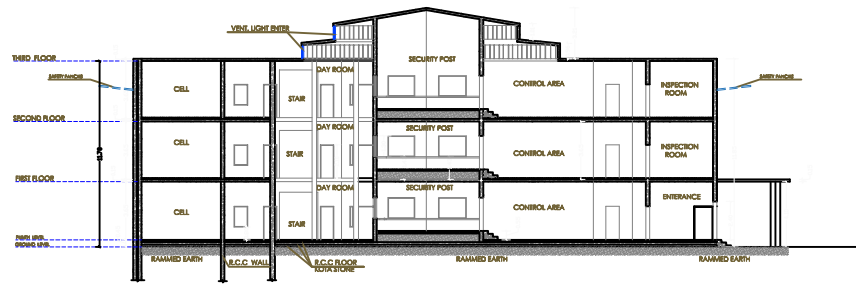
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TERRACE PLAN



FRONT ELIVATION



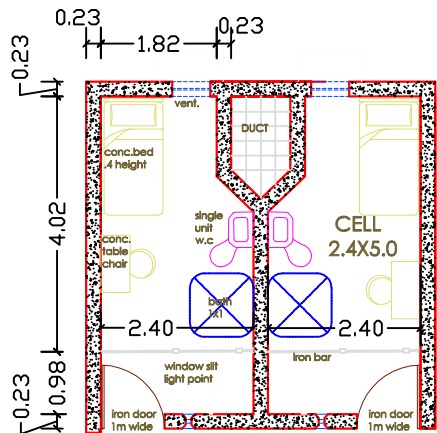
SECTION AA'

BLOCK DETAIL

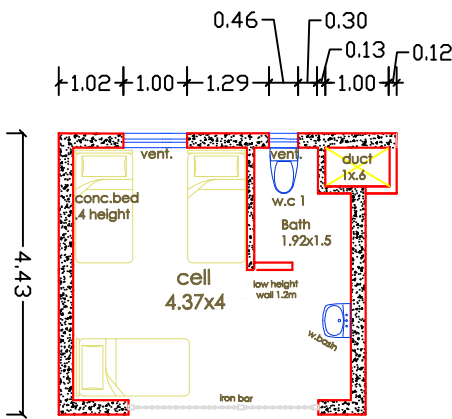
HIGH SECURITY BLOCK

GROUND FLOOR - 3481 sq.m.
FIRST FLOOR - 3481 sq.m.
SECOND FLOOR - 4497 sq.m.

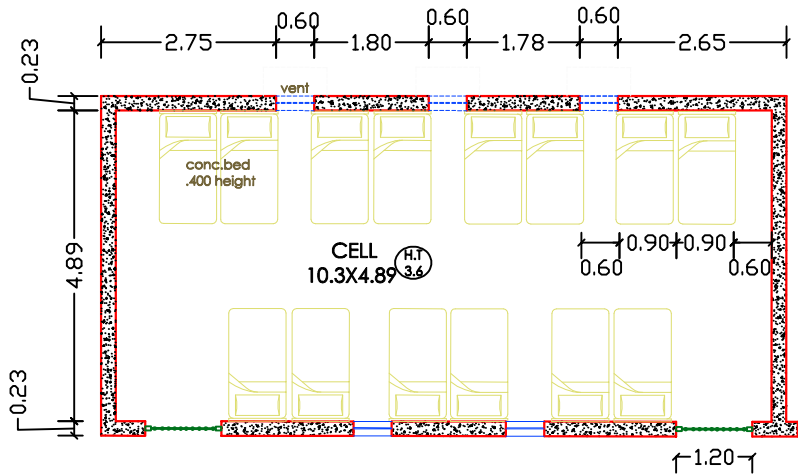
TOTAL BUILDING HEIGHT -11.86 M



SINGLE OCCUPANCY CELL



TRIPLE OCCUPANCY CELL

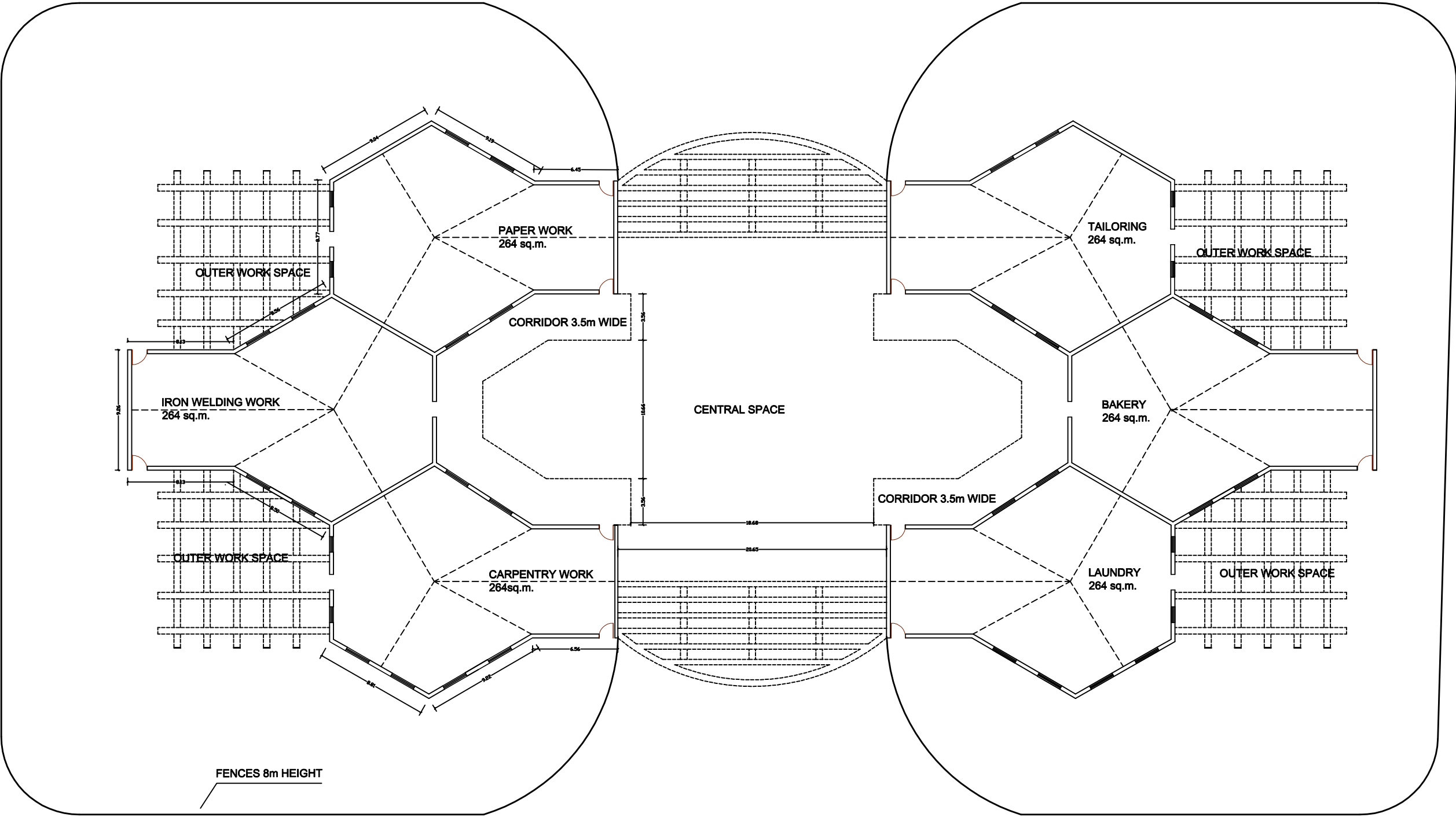


GROUP INMATES CELL

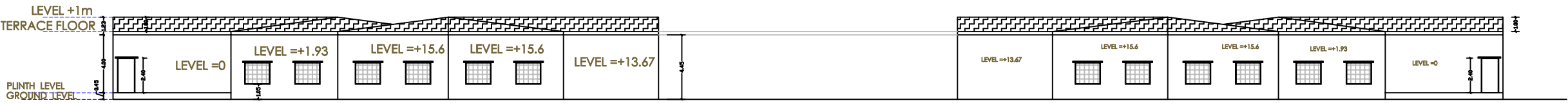
HIGH SECURITY BLOCK

NOTE - ALL DIMENSIONS ARE IN M SCALE - 1: 5

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ARCHITECTURAL DESIGN-X	SIGN	REMARK
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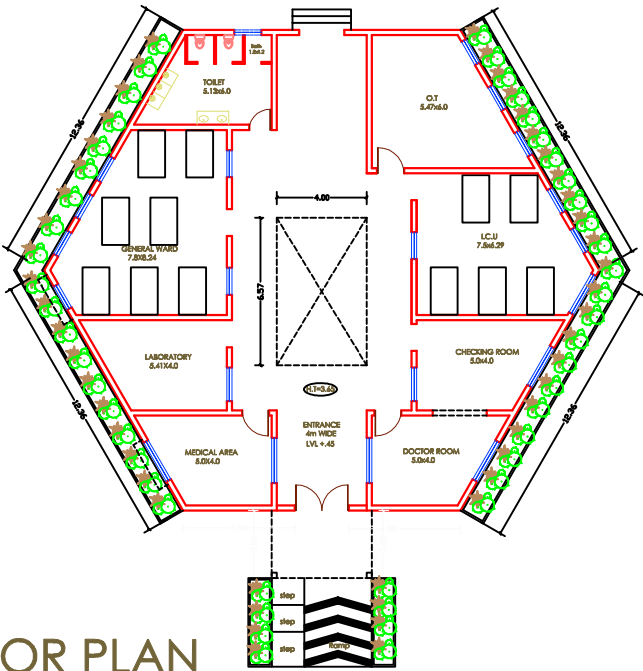
GROUND FLOOR PLAN



FRONT ELEVATION

BLOCK DETAIL

- SCHOOL - GROUND FLOOR - 756 sq.m.
- WORKSHOP - GROUND FLOOR - 1880 sq.m.
- MESS - GROUND FLOOR - 593 sq.m.
- HOSPITAL - GROUND FLOOR - 383 sq.m.



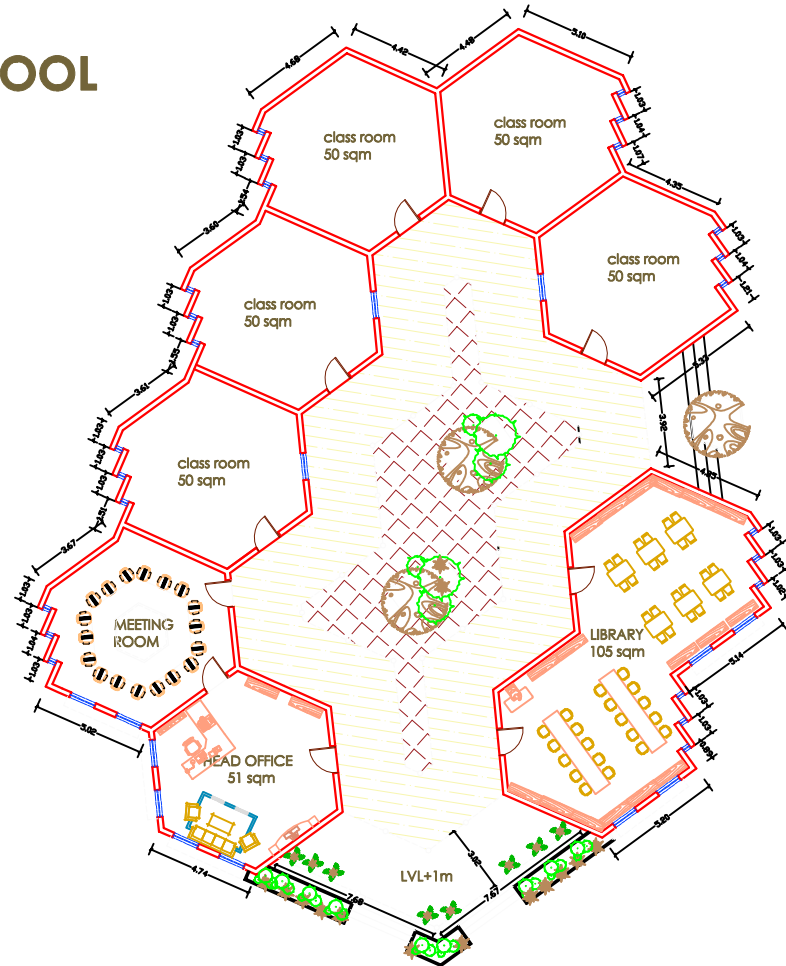
GROUND FLOOR PLAN



FRONT ELEVATION

WORKSHOP, SCHOOL, HOSPITAL & MESS

SCHOOL

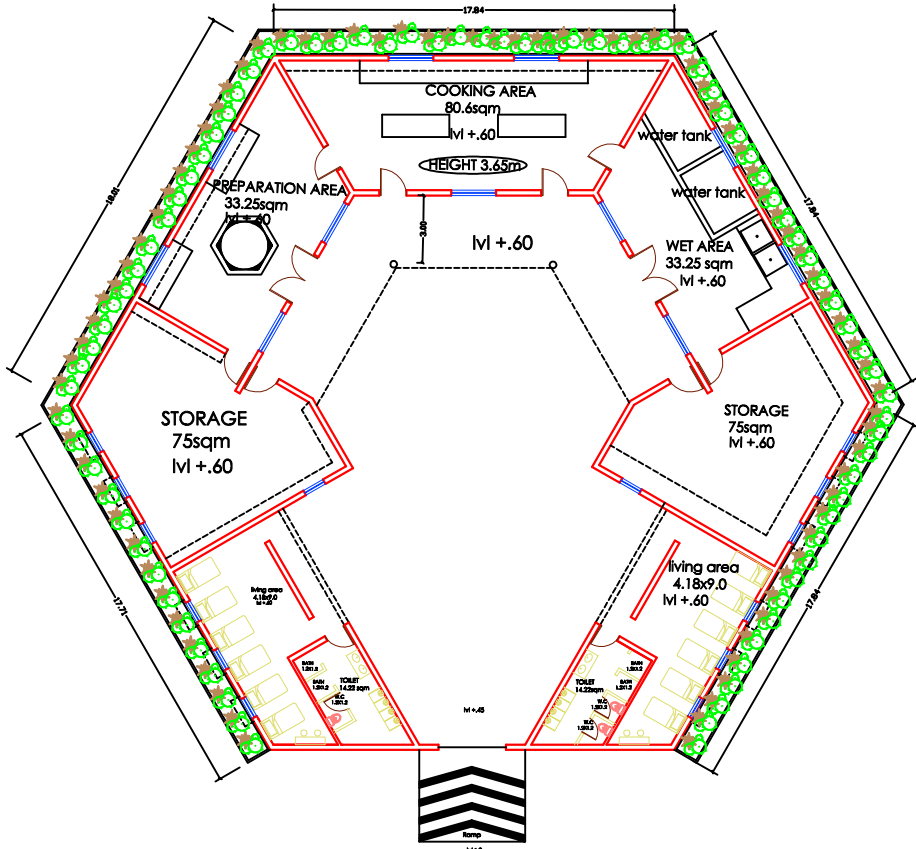


GROUND FLOOR PLAN

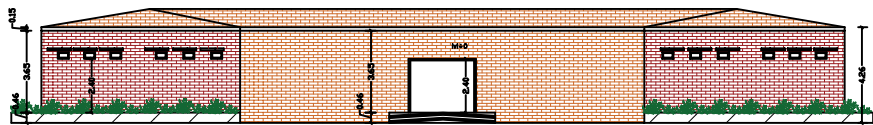


FRONT ELEVATION

MESS



GROUND FLOOR PLAN



FRONT ELEVATION

NOTE - ALL DIMENSIONS ARE IN M SCALE - 1 : 3

HITESH KUMAR	DATE	SHEET NO.
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ARCHITECTURAL DESIGN-X	SIGN	REMARK
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