

Architectural Footprints of CPWD

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Architectural Footprints of CPWD

हरदीप एस पुरी
HARDEEP S PURI



सत्यमेव जयते

आवासन और शहरी कार्य
राज्य मंत्री (स्वतंत्र प्रभार)
भारत सरकार
MINISTER OF STATE (I/C)
HOUSING AND URBAN AFFAIRS
GOVERNMENT OF INDIA

Message

Architecture is both the art and science of the built environment. It caters to the needs of both the individual, society and the nation for providing the human habitat, the connected infrastructure and associated systems.

In many ways, the culture of people is reflected in the architecture of the city they inhabit. It is an organic linkage. The design, structure and the aesthetics of buildings and monuments in a city embody the aspirations of its residents.

Like nature which outlives a human being's life, the structures we design and build have the potential to outlive us only if they truly reflect our ethos and culture.

Apart from the technical knowledge of the curriculum in order to truly do justice to their profession, architects and students of architecture must imbibe this ethos,

I congratulate the Architectural wing of CPWD for release of the publication **"Architectural Footprints of CPWD"**.

(Hardeep S Puri)

New Delhi
21 June 2018

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सत्यमेव जयते

Secretary of Housing and Urban Affairs
Govt. of India
आवासन और शहरी कार्य
सचिव
भारत सरकार

MESSAGE

CPWD is a premier organization of Government of India and plays pivotal role in planning and constructions of Governments projects all over the country. The department has the capacity to undertake various kind of projects from the smallest work at remotest place to mega projects in Metro cities with immense resources of proficient Architects, Engineers & Horticulturists under one umbrella.

The book on " Architectural Footprints of CPWD" delineates various activities of CPWD Architects along with some sterling projects designed by them at inception stage and now in modern era, all over the country.

Contribution made by them in carrying forward the missions of Govt. of India like Accessible India Campaign, Energy Efficiency and Sustainable development is worth appreciating.

I wish them all the very best and hope that these kind of books become regular feature to showcase contribution of CPWD to their clients and reference for new generations to come.

DURGA SHANKER MISHRA



सत्यमेव जयते

DG (Planning), CPWD
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MESSAGE

Architecture is the only profession which encompasses the four major fields of human endeavor i.e. Humanities, Science, Art and Technology. It calls for originality, creativity, conceptualization, perception, aesthetic values and a holistic judgment of people, places, objects and events.

It has given me immense pleasure that the Architectural Wing of CPWD is going to delineate some of their recent projects along with some old marvels in their book “Architectural footprints of CPWD”.

The book shows the imagination and flair of the Architects which is spread along the length and breadth of the country. It also embraces various other roles performed by them and handiness of specialized human resources like Project Management, Urban and Regional Planners, Housing, Landscape and Environment Planning besides being Architects.

I am sure once this book reaches the general masses as well as our clients they will be able to appraise and appreciate the originality and creativity of the Architects of this department.

R.K THATHU



PRABHAKAR SINGH
Director General

सत्यमेव जयते

भारत सरकार
Government of India

CPWD

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MESSAGE

Architectural wing of CPWD is the main Architectural planning and designing force in creation of various iconic buildings throughout the length and breadth of the country. The Architects of this department through their imagination, originality and creativity, have designed several state-of-the-art buildings which have brought glory to the department.

Apart from designing buildings, Architects of this department take up numerous Interior and landscape design works. They are instrumental in implementing different policies of the Govt. of India like Barrier Free built environment, Green Buildings, Energy efficiency and Heritage Conservation etc. They have also published various manuals and technical handbooks on landscape, barrier free design, conservation and preservation of buildings, which are referred by various other government departments.

I am proud of the Architects of CPWD and confident that they will go on excelling in the coming years and bring more laurels to the department.

PRABHAKAR SINGH



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PREFACE

"Architectural Footprints of CPWD" includes glimpses of construction projects, landscape works, interior works and art works designed by CPWD Architects. It gives an insight of the in-house expertise available in the department and their contribution in bringing glory to the Nation. It also brings out the role played by them to advise the Ministry of Housing and Urban Affairs and other Ministries on architectural planning of infrastructure development, repair and restoration of heritage structures and town planning. The book mentions about the publications brought out by them and their participation in other technical activities like presenting papers and delivering expert talks.

As you flip through the book, you will discover the imagination, creativity and originality of the Architects and will realise the changes in architectural style with times, invention of new materials and equipments for human comfort i.e. Indo-British architectural style in 1950s, seen in Supreme Court of India building, Traditional Indian architectural style with influence of modern architecture in 60s seen in Rabindra Bhawan and finally complete shift to modern architecture. Promotion of energy efficiency to improve environmental pollution and quality of life gave rise to creation of most modern - green, energy efficient and net zero energy buildings like Jawaharlal Nehru bhawan and Indira Paryavaran bhawan.

I wish to express my gratitude to Shri Hardeep Singh Puri, Hon'ble Minister of Housing and Urban Affairs for releasing the book, Shri Durga Shanker Mishra, esteemed Secretary for his support and encouragement, Shri R.K Thathu, Director General (Planning), CPWD, Shri Prabhakar Singh, Director General , CPWD for their inspiration in bringing out this book.

I also express my deep appreciation to the Sr. Architect Sh. Abhishek Bose, Architect Sh. Rajesh Singh, Deputy Architects, Sh. Yogendra Pal Singh Yadav, Deepali Mishra and Asst. Architect Sh. Gaurav Saraswat, who have put in their sincere efforts and hard work to bring out this publication and other members of office of the ADG (Arch) who contributed in preparing out this book.

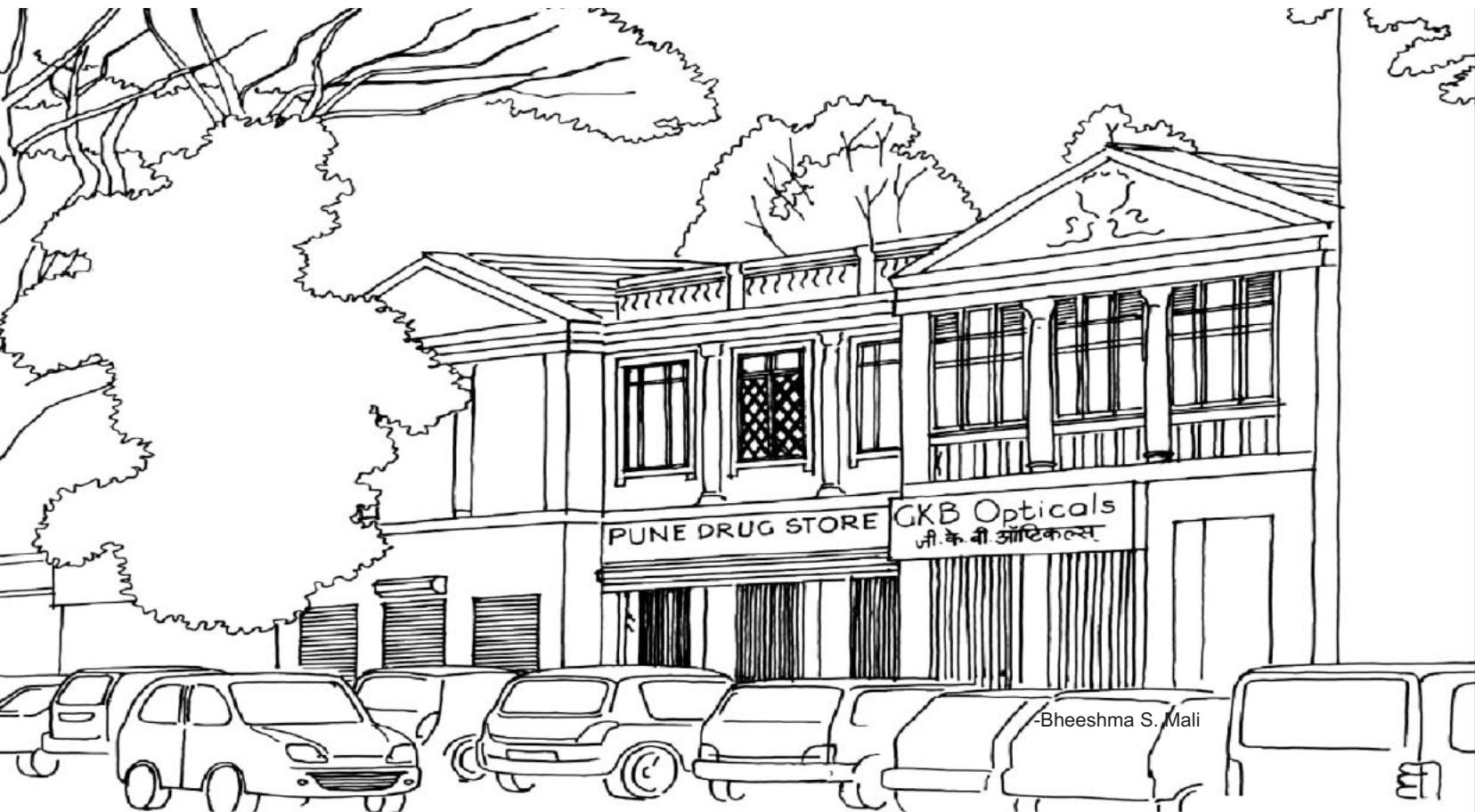
I wish that the book reaches to the masses and imparts them the sense of visualization to appraise the importance of imagination, creativity, originality and state of the art technology of the buildings designed by CPWD Architects.

Usha Batra

USHA BATRA

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Versatile Role of Architects in CPWD

ROLE OF ARCHITECTS IN A TYPICAL CONSTRUCTION PROJECT

CPWD is a multi - disciplined organization with officers having core competency in the fields of architecture, civil engineering, electrical and mechanical engineering and horticulture. Involvement and close co-ordination between all the four wings is of prime importance for efficient planning and smooth execution of the work.

Projects are allocated to Sr. Architect unit, based on their jurisdiction, by the Chief Architect. Projects with value greater than INR 100 Crore are dealt directly by the office of Chief Architect. The office of Senior Architect is a typical working unit consisting of Architects, Deputy Architects, Asst. Architects, Technical officer and Assistant (AD)s.

A stage-wise involvement of a typical construction project has been depicted in a graphical manner. Also, the role of client and CPWD engineers has been highlighted wherever their inputs are required.

1. **Preparation of Concept design, Preliminary Drawings and Specifications:** Role of Architects, in a typical construction project, begins at the project initiation / conception stage where they are responsible for collating and assimilating client requirements. Architects are the mastermind behind the project design. Architect visits the site to have an overview of the same and interacts with the representative of client and collates their requirements. Requirements are formulated into space functions and conceptual design of the building, and discussed with client. Architect accommodates additional requirements, if any. After finalization of concept, he prepares preliminary design and specifications and obtains approval on the same from client.
2. **Preparation of Submission drawings and obtaining approvals from local authority and other statutory bodies like CFO, Urban Arts Commission, Airport Authority of India etc.:** The preliminary drawings approved by client are converted to submission drawings by detailing them to the desired extent, including elevation, section, area details and other required details. Building services are incorporated with inputs from the Engineering wing. These drawings are submitted to various authorities for seeking approval. Regular interactions with the authorities are carried out for making any additions / alterations as and when required in order to obtain approval on these submission drawings.
3. **Preparation of working drawings and detailed specifications:** After seeking approval from various authorities, structural and detailed electrical and air-conditioning inputs are obtained from Civil and Electrical Engineers respectively. These drawings are then converted into working drawings for carrying out construction at site. Detailed specifications are also prepared by the Architects, for preparation of detailed estimates by Engineers.
4. **Inputs at Construction stage:** As the construction starts, Architects are required to make site visits and issue detailed drawings e.g. details of doors / windows, flooring pattern, toilets, kitchen, false ceiling and various other details as per requirement of building/ project.
5. **Project completion:** Once the building is completed, completion drawings as per actual construction done at site are prepared by the Architect, for seeking 'Completion Certificate' from local authority.



Role of Architects

Role of Client

Role of Engineers

CENTRAL VISTA ADVISORY GROUP (CVAG)

The requisition of development of the Central Vista and Secretariat complex had been engaging the attention of the Ministry of Works Housing and Supply since 1962. In view of the national importance of the area and the need for its planned development, it was decided to bring the entire area under strict architectural control. No construction or development in the area extending from the Rashtrapati Bhawan to the C- Hexagon around the India Gate would take place without the specific approval of the Government of India in the Ministry of Works Housing and Supply. It was also decided to setup a specialized study group of Architects and Town planners to advice the government on such aspects of the development of the central vista and secretariat complex as may be referred to it from time to time. The composition of the study group as per OM no. 6/11/60-WI, dated 04/09/2018 as follows:

1	The Chief Architect & Town Planner – CPWD	Chairman
2	The Chairman, Indian Institute of Architects	Member
3	One Representative of the Indian Institute of Architects	Member
4	The President, Institute of Town Planners, India	Member
5	One Representative of the Town Planner of India	Member
6	Two representatives of the Town and Country Planning Organisation	Member
7	One senior Architect of the CPWD	Member Secretary

The Chief Architect, NDMC was included as a member of the committee on 09/04/1969.

Keeping in view the changes that had taken place over the years. It was decided by the ministry in 2002 to reconstitute the study group with composition as follows:

1	ADG (Arch), CPWD	Chairman
2	Chief Architect (NDR), CPWD	Member Secy
3	Director/ Dy.Secy. Delhi Division. MoUD and P.A	Member
4	Chairman, Indian Institute of Architects	Member
5	One representative of IIA (Northern Chapter)	Member
6	Chairman, Institute of Town Planners, India	Member
7	One representative of Institute of Town Planners, India	Member
8	Chief Planner, TCPO	Member
9	Chief Architect, NDMC	Member
10	Commissioner (Planning), DDA	Member
11	Secretary/ DUAC	Member
12	Joint Secretary, Min. of Environment/ his representative	Member

Broad decisions taken by CVAG



Addition alteration in r/o Armed Forces Dental Clinic 30, Tyagraj Marg Proposal was approved in toto on June 12, 2018.



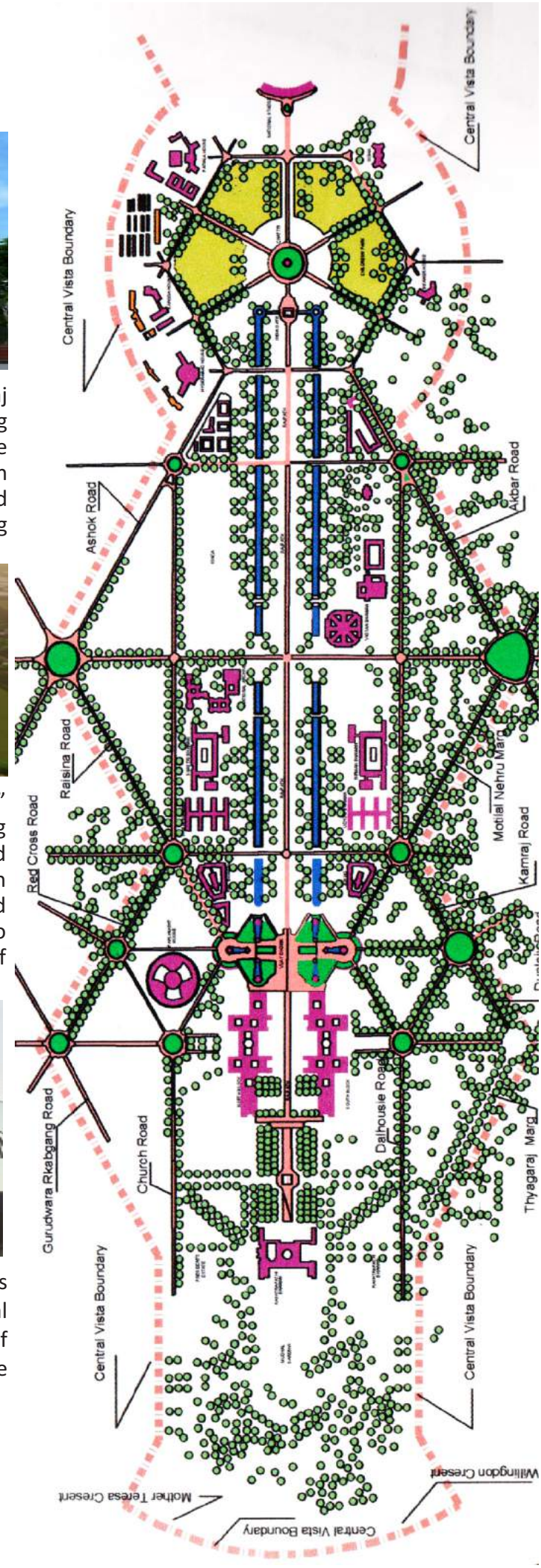
Proposal for Office building for Indian Navy at Tyagaraj Marg, New Delhi was approved in 2018 after incorporating the observations suggested by CV advisory group like proportions of dome, color scheme, changes in connecting part of dome to main building and improvements suggested in elevation from Tyagraj Marg side.



Proposal for construction of War Memorial at "C" Hexagon, India Gate was approved after incorporating suggestions made by CVAG in 2016 i.e. to reduce hard paving area, colour scheme of veteran wall, to maintain symmetry of planned plazas,tri colour landscaping around canopy, restricting height of busts in Param Vir Chakra to 1.5m, providing amenities as per footfall and provision of emergency exits.



Make in India Lion Sculpture installation New Delhi was reviewed after erection in 2016. CVAG suggested removal of glass cage, change in finish and lowering height of pedestal, change of lion's facing etc. And finally the sculpture was dismantled in 2017.





Proposal for construction of Office building of DG S&D at 16 A, Akbar Road, New Delhi was approved in 2017 after incorporating the suggestions made by CVAG like missing imposing character of building, reduction in glass area, proportions of colonnade w.r.t. height of building and increase in ht. of red sandstone as per LBZ area.

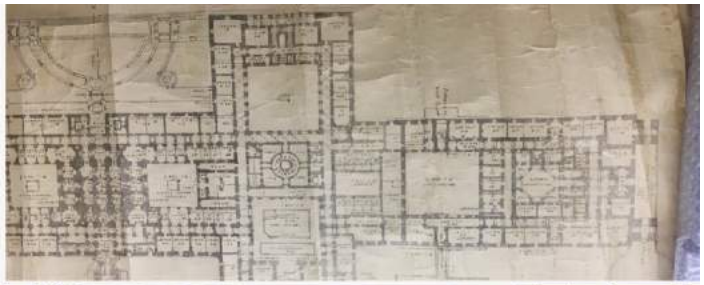
Year	Description	Decision Taken by CVAG
Aug 2016	Installation of Mobile Communication Poles in Krishi Bhawan, Udyog Bhawan and Nirman Bhawan.	CVAG observed that the Antenna were an inescapable necessity and that an attempt to camouflage by means of jali etc. will not only make it look bulky but at the same time entail other problems like cleaning, bird nests, maintenance issues etc. CVAG approved the installation of towers in location as far away from the edge of the terrace as possible without jali / screens with proviso that as and when new technology becomes available the present Antennas should be replaced with less intrusive equipment.
Aug 2016	National War Museum at Princess Park Barracks andNational War Memorialin the lawns of C- Hexagon. Connecting National War Museum and National War Memorial with a tunnel below C-Hexagon road.	Since MoD has entrusted this work to MES, who shall hold an Architectural Competition for designing of the project, CVAG desired that MES may place the draft completion dossier before the committee. On perusal of the competition brief, CVAG observed that the brief should emphasize that there should be minimal intervention in the Central Vista. There should be a stipulation that no structure of any kind whether wall, pedestal, public convenience, street furniture etc. etc. should be more than 1.5 m above the road level. CVAG did not accept the proposal of the tunnel between C-Hexagon and Princess park, and recommended that a comprehensive circulation plan for access across C-Hexagon be prepared by local body.
Sept 2015	Construction of Underground parking at ShastriBhawan building, Dr. Rajendra Prasad Road, New Delhi.	CVAG observed that entry / exit to the basements need to be re-planned for smoother traffic circulation. Turning radius of ramp need to be checked. Parking efficiency needs to be improved. Project was approved by CVAG subject to above modifications in the design. CVAG also directed CPWD to explore the provision of Automated Parking and seek MoUD view on the same to achieve desirable satisfaction level of parking provision.
Apr 2015	Completion Certificate & Completion Plans in r/o Studio Apartments in Block – I Schedule A at President's Estate New Delhi	The proposal was deliberated upon by CVAG and was approved.
Sept 2014	Lighting show 3D Projection Mapping of India Gate at one side.	CVAG approved the proposal subject to compliance of following observations: The sanctity of India Gate and its precincts should be respected. The projected pictures on India Gate shall not be distorted and also respect the silhouette of India Gate which shall be maintained. The visual content to be projected on India Gate shall also be shown to the Committee. Committee suggested that Dept. of Tourism could include sound and music along with visuals. However the sound should be limited only to the lawns and adequate care should be taken so that traffic is not disturbed. Also, audio system to be installed on existing poles.
May 2014	Addition and Alteration in r/o Vice President House at 6, Maulana Azad Road	The proposal was deliberated upon by CVAG and found acceptable.

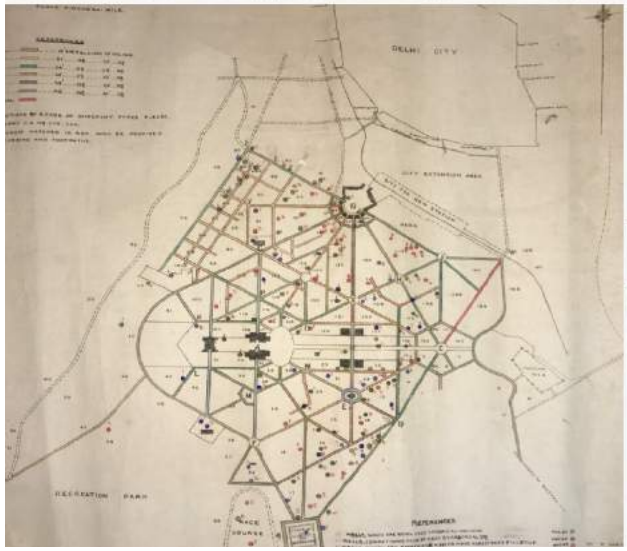
DOCUMENTATION CENTER

The documentation center in the office of ADG (Arch) acts as a repository for a number of documents of eminent buildings of Government of India. This repository stores approximately 50,000 drawings, photographs, layout plans, models and slides that date back to pre-independence era, including details of legendary buildings such as Rashtrapati Bhawan, Parliament House, North and South Block amongst others although most of them are in very bad condition. About 7000 drawings have been scanned till date which includes Buildings like Bungalows of LBZ, imperial Delhi Government house, Delhi secretariat legislative building, Race course, Tis Hazari court, Krishi Bhawan, Udyog Bhawan among others.

Recently, the documentation center has been facilitated with an A0 size, Flatbed Scanner which is capable of scanning the old drawings for easy maintenance of records in soft copy. Many drawings and models have worn out over the time. Proposal is being worked out for preservation of these drawings/ models for proper upkeep.

The documentation center is presently being renovated which includes creation of an Audio-Visual Room and Exhibition Space for efficient communication and sharing of data.





IN-HOUSE PROJECT APPROVALS IN CPWD, DELHI

The Government Building Act of 1899 provides for the exemption from the approval of local body/ municipality for certain buildings and lands which are the property, or in the occupation, of the Government of India and are situated within the limits of a municipality.

In this regard an OM no. 7/3/2016-WII/DG/Vol.III/312 dated 08 June 2017 was issued by CPWD, which elaborates the procedure for getting the approval for the construction projects being designed and executed by CPWD.

All projects in Delhi are now being approved by CA(NDR) and CA(DR) based on their jurisdiction and also forwarded to DUAC and CFO for their approval for which CPWD and Public Works Department, GNCTD are treated as 'other local body' in terms of Section 11(1) of DUAC Act, 1973

- A committee is set-up under chairmanship of respective Chief Architect dealing with the project having SE (C), SE (E) & Deputy Director (H) as members, to examine all the drawings and to certify that the building plans conform to the building by-laws, after assessing all the requirements of Electric Load, water-supply, sewerage and horticulture, The committee then submits the proposal in complete shape to respective local body as a notice about proposed construction.
- The Chairman of the Committee i.e, CA will forward the drawings to respective authorities for obtaining all necessary approval from DUAC, Airport Authority of India National Monument Authority, Heritage Committee, Advisory Committee of Central Vista and Chief Fire Office.
- If required, In order to secure Environmental Clearance, a consultant may be appointed as per the guidelines laid down in CPWD Works Manual.

Several projects have already been submitted and are under the approval process in the office of CA(NDR) and CA(DR). Some of the already submitted projects for in-house local body approval in CPWD are:

CA(NDR)

- Govt. of India Press, Minto Road, New Delhi
- Redevelopment of Type Quarters in President's Estate New Delhi
- Type 7 GPRA at Pkt 1 Deen Dayal Upadhyay Marg, New Delhi

CA (DR)

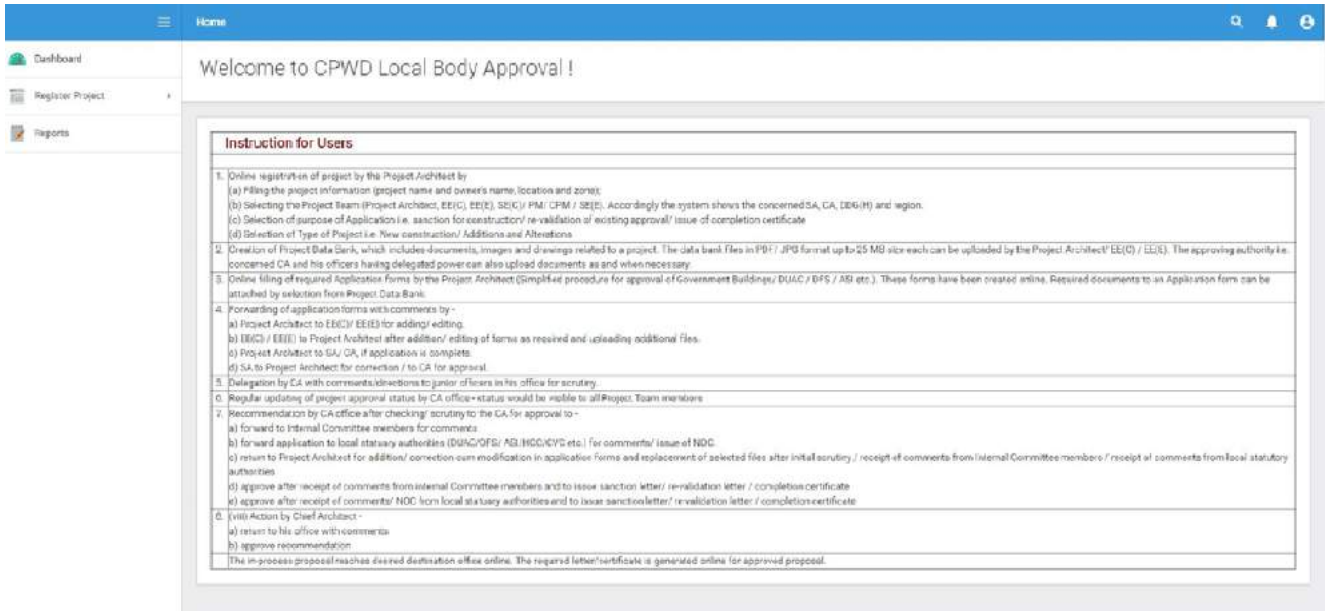
- Redevelopment of Bhavishya Nidhi Enclave (Residential Complex), EPFO at Malviya Nagar, Delhi
- Redevelopment of GPRA at Mohammedpur, Delhi
- Redevelopment of GPRA at Thyagraj Nagar, Delhi
- Redevelopment of GPRA at Kasturba Nagar, Delhi
- Redevelopment of GPRA at Srinivaspuri, Delhi
- Akshaya Urja Bhawan, Office of Ministry of New and Renewable Energy, Lodhi Road, Delhi
- National Center for Integrated Pest Management- Mehrauli, Delhi
- Office of Chief Labour Commissioner, Dwarka, Delhi
- Delhi Public Library, Paharganj, Delhi
- School of Planning and Architecture, Vasant Kunj, Delhi
- Research Center for BSNL at Ghitorni

Among the projects approved in-House by CA and submitted online to DUAC for approval are:

Sno.	Project Name	Built up Area (Sq m.)	Status of approval from DUAC
1	National Center for Integrated Pest Management Mehrauli	31040	Approved
2	Delhi Public Library – Paharganj	4848	Under Consideration
3	School of Planning and Architecture (New	87000	Under Consideration

Online Local Body Approval Module: e-Governance unit of CPWD has developed an online local body approval module for registration, processing and online integration with other local statutory authorities and issue of approval / completion certificate by CAs for in-house Government Projects being undertaken by CPWD in Delhi.

The module is integrated online with DUAC. The DUAC application form with required documents can be submitted online by CA, CPWD to DUAC, who after consideration can send comments / NOC online to CA, CPWD.



Snap shot of Online Local Body Approval Module of CPWD



Delhi Public Library, Paharganj



NCIPM, Mehrauli

HERITAGE CELL OF CPWD

The Heritage Cell of CPWD was constituted to take care of all the heritage buildings under the ambit of MoHUA, vide MoUD OM No. 2/11/2011/-WII (CPWD)/EW-I dated 30/03/2012. It is headed by ADG (Arch) as overall in charge with CA (NDR) as its chairman. It is created for undertaking conservation and maintenance of heritage buildings owned by Government of India and its agencies. The cell also renders advice to field units in CPWD, MoHUA and other ministries on conservation and restoration of heritage buildings. The execution is taken up by the respective CPWD Engineers.

The recommendations of Heritage cell cover an array of subjects related to conservation, such as adaptive reuse, restoration, renovation, preservation, retrofitting and lighting of heritage buildings.

National Academy of CPWD, Ghaziabad, organizes training session and specialized courses to bring awareness among the Architects and Engineers of CPWD about the conservation and restoration of the Heritage buildings. Efforts are being made to associate SPA Delhi, INTACH and Aga Khan Foundation etc. for the preparation of specialized training capsules, to train architects and engineers of CPWD.

Items related to the preservation of Heritage structure after consultation with ASI have also been included in the DSR-2012.

CPWD has numerous drawings related to the Heritage buildings in its documentation centre. Efforts are being made to digitize these drawings for proper documentation, reference, ease of accessibility and sharing.

The recent project under consideration of Heritage Cell is Gorton castle building at **Shimla.**

GORTON CASTLE BUILDING AT SHIMLA

The building was commenced in November 1901 and completed in May 1904. The original design of this building was conceptualized by Sir Swinton Jacob with the expenditure of Rs. 13,42,901.

Presently, the Gorton Castle houses the office of Pr. Accountant General of Himachal Pradesh. It has many special features as shown below which resemble Neo-gothic and Rajasthani style, some of which are described as under:

- The building has high pitched roof with Nainital pattern iron sheets, ornamental dormers, gutters, valleys, ridges, wall and chimney flashing etc. adding to the aesthetics. Special features of flag post add beauty to the artistic roof line.
- Balconies have ornamental stone work in Rajasthani style with stone railing, jalis, balusters and handrails on ornamental stone bracket carved out of single stone. It has ornamental copings/arches/Mehrabs at number of locations, that enhance the aesthetics of the structure.
- Tall canopies having steep sloped conical shape up to 75-80 degree slope and having height up to 9m add to the aesthetics of the building improving overall sky line of the location.
- Glass roof in the central staircase area over wooden ornamental trusses avoids artificial lighting during day time.
- Central staircase has ornamental cast iron railing with wooden treads and risers and ornamental hand rail which enhance the aesthetics of the interior of the building.
- Two big central courtyards take care of passages of number of services like rain water drainage and fire hydrant lines etc.
- A Major fire broke out on 27-28 January 2014 causing massive damage to the building. Top two floors including the roof were totally gutted in fire causing severe structural damages to most of the components of the building. Heritage cell of CPWD visited the site to access the damage and further course of action.



Special features of Gorton Castle, Shimla

This building is listed as one of the heritage buildings by Himachal Pradesh Government, as well as by Ministry of Urban Development, Government of India, New Delhi. Therefore, Heritage Cell of Ministry of Urban Development visited this building.

After inspection of the building, considering retrofitting measures suggested by CBRI Roorkee and original drawings of the British architects prepared during original construction, the members made the following recommendations in order to retain heritage character of the existing buildings:

- Walls to be reconstructed using matching stones with lime/cement mortar.
- Floor finishes to be matching with the already existing flooring- Mosaic/ CC flooring.
- Minimum amount of false ceiling to be used. Item for false ceiling- Calcium silicate/aluminum perforated/aluminum strips.
- All doors to be built as per original design and specifications.
- Doors/windows frames and shutters, staircase roofing and railing, eve boards, jalis, cornices and arches to be matching with the existing ones.
- All toilets with modern fixtures and tiles.
- Energy efficient lighting and central heating system to be redesigned.
- Fire place to be restored, but not to be used. Top to be closed keeping the view as it is.
- Open court yards to be maintained. But all round chhajjas added in court yard to be redesigned to merge with the building.
- Chimneys feature to be retained for aesthetics but vent pipes to be sealed.
- All external walls to have exposed stone finish as existing.
- No lift is provided in the existing building. Machine less/ capsule type lifts with features matching to building features may be provided.
- Provisions to be made for barrier free accessibility, Rain water harvesting and DGUs.
- All services may be redesigned keeping visual aesthetics in mind.
- A well-documented comprehensive scheme to be developed for the entire building.
- All unauthorized constructions to be removed. Original building external envelope to be reclaimed. A clear 6 mtr. wide access all around the building for fire tenders should be provided.
- Various features such as cornices, balconies, Jharokhas, eves board, jams, cills, soffits etc to be redeveloped.
- Appropriate seismic retrofit measures to be provided as per recommendation of CBRI, Roorkee.



ROLE OF ARCHITECTS AS TECHNICAL ADVISOR

Office of ADG(Arch), serves as the Technical advisor to the Ministry of housing and Urban Affairs (MoHUA) for offering technical advise on land allotment cases with respect to the provisions of Master Plan/ Zonal Plan and Development Control Norms. It carries out timely site visits in order to assess the status of land. It also liaison's with Ministries/ Departments to analyze their requirements in order to assess the appropriate utilization of Government land under consideration.

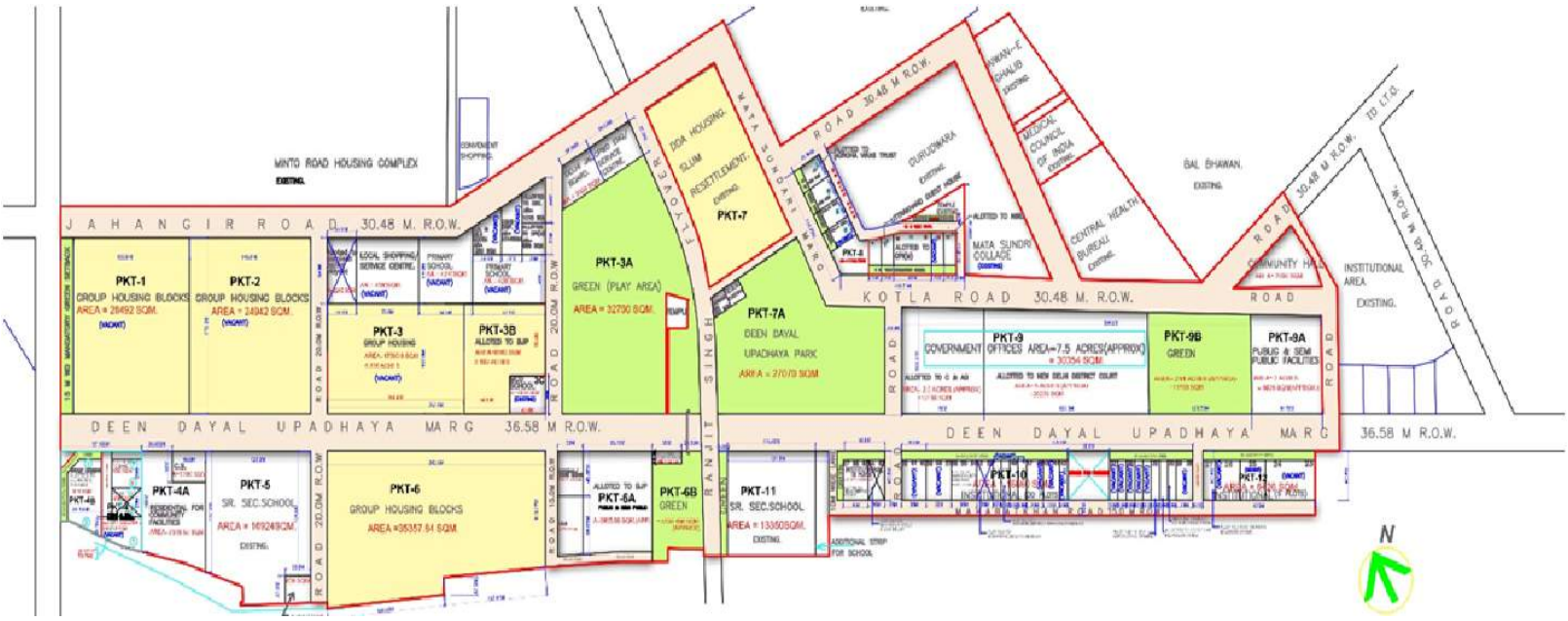
It is actively involved to offer technical advise during 'Land Allotment Screening Committee (LASC) meeting' conducted by Addl. Secretary MoHUA for allotment of land . It is also invited to offer advice on Master Plan, Building Byelaws and Development Control Norms by Delhi Development Authority (DDA) during their 'Technical Committee Meeting' .

It participates as a technical expert in the meetings of Heritage conservation committee of DUAC, Council of Architecture, BOW meeting of School of Planning and Architecture, Construction and Coordination Committee of Navodaya Vidyalaya Samiti and the Technical Committee Meeting on HRIDAY (Heritage City Development and Augmentation Yojana to assess the DPRs of the proposed projects under the scheme).

It is instrumental in preparing land development / re-development proposals in co-ordination with Land and Development Office as per the updated Development Control Norms.

In addition to the above activities, it is instrumental in development and updation of Standard designs of general pool residential accommodation (GPRAs) (Type II to Type VIII) and (Type II to Type V) for paramilitary forces to be followed at various locations across the country.

Overall besides construction projects, Architectural wing of CPWD plays a pivotal role in matters related to Land, design services for GPRAs and various Schemes of Government of India promoting conscious Urban Development.



Layout plan showing - Land Allotments and land use plan of Deen Dayal Marg

ONLINE LAND REPORTING AND MANAGEMENT SYSTEM

Recently, as per requirement of the Ministry of housing and Urban Affairs (MoHUA) to maintain data bank for Lands available across the country, new module of Land reporting / management system has been developed in-house by the e-Governance unit of CPWD in consultation with ADG(Arch) and Land and development officer for online filling up and updating the data of MoHUA lands spread all over the country and under maintenance of CPWD by respective EEs. All kinds of required information have been included. Once complete data is filled up, it will become a wonderful data bank. This module includes two separate sheets for updating data on

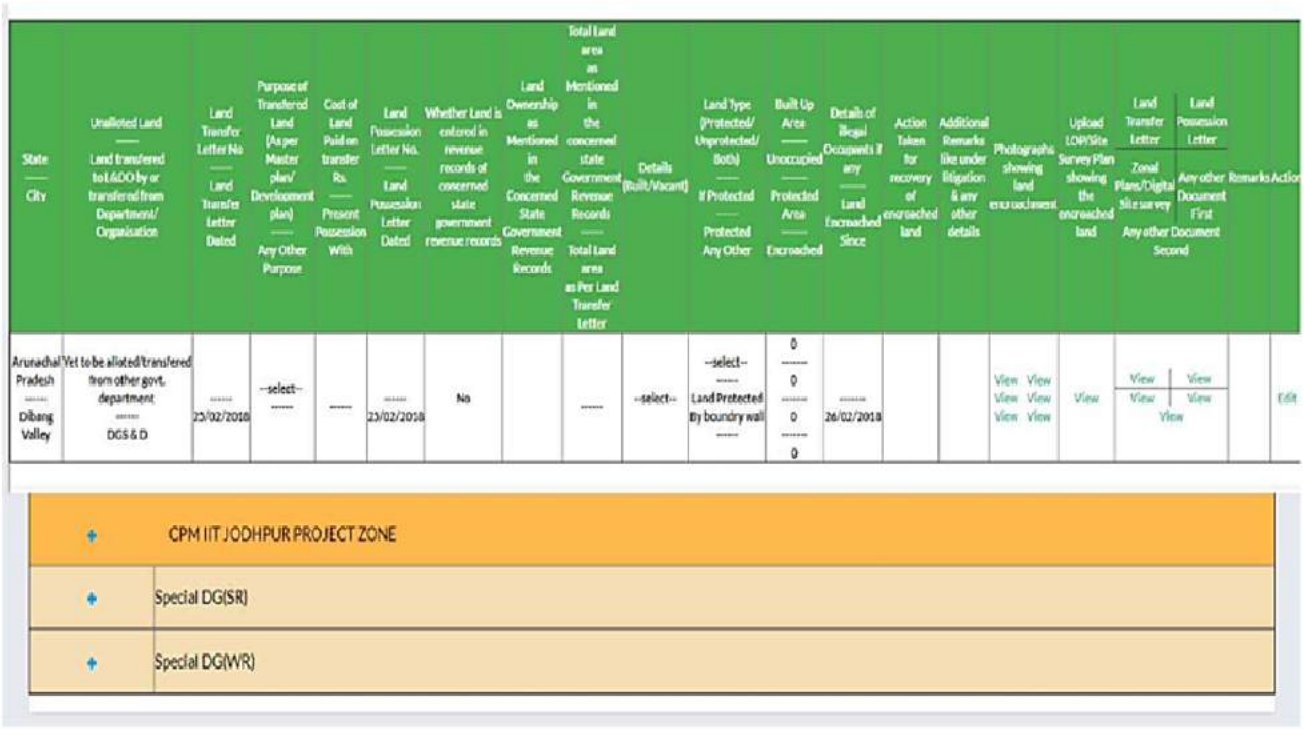
i. Allotted land

ii. Not allotted / yet to be allotted land

and generate separate reports accordingly.

The data can be filled up and edited only by the concerned EEs. The data and the reports can be generated, viewed and printed by the EEs and concerned controlling officers. The required land information / management reports of all MoHUA lands under the care and maintenance of CPWD can be generated, viewed and printed by the ADG (Arch), ADG (TD) and DDG (Works). These reports can be saved in the excel format.

The module for online land reporting / management system in CPWD is accessible through PIMS login on CPWD website.



Snap shot of online Land Reporting and Management System in CPWD

HERITAGE CONSERVATION COMMITTEE

Heritage Conservation Committee is appointed by the Government to advice / decide on the matters related to heritage sites, buildings, precincts, street etc. that are of historic, aesthetic, architectural, cultural or environmental significance; and those natural feature, areas of environmental significance or of scenic beauty . ADG (Arch), CPWD is an active member of Heritage Conservation Committee. The Heritage Conservation Committee has been reconstituted vide Ministry of Urban Development's notification no.K-12016/6/2003-DD-I dated 15th September 2016 as follows:

1	Special Secretary/Additional Secretary, (Ministry of Urban Development)	Chairman
2	Additional Director General (Architecture), CPWD	Membe
3	Chief Planner, Town & Country Planning Organization	Member
4	Chief Town Planner, MCD	Member
5	Commissioner (Plg.), DDA	Member
6	Chief Architect, NDMC	Member
7	Representative of DG, Archeo-logical Survey of India	Member
8	Chief Engineer (Structure) in Central Design Organization (CDO), CPWD	Member
9	Sh. Sanjay Puri (Urban Designer) [Principal Architect of Sanjay Puri Architects, Mahalaxmi, Mumbai]	Member
10	Dr. Parul Pandya Dhar (Historian) [Associate Professor, Department of History, University of Delhi]	Member
11	Ms. Vertika Sharma (Conservation Architect) [Advocate, Delhi High Court]	Member
12	Prof. Dr. Rommel Mehta (Environmentalist) [Professor, Landscape Architecture Departm-ent, SPA, New Delhi]	Member
13	Director, National Museum of National History	Member
14	Secretary, DUAC Secretary, Delhi Urban Art Commission	Member Secretary

The tenure of the Chairman and Members of other than Government Department/Local Bodies is three years.

The terms of reference of the Committee inter alia are:

- To advice the Commissioner, MCD/Vice Chairman DDA/Chairman NDMC on following issues:
  - Whether development permission is to be granted under the bye-law 7.26 and the conditions of permission.
  - Whether to allow commercial / office/hotel use in the heritage building/precincts and when to terminate the same.
  - Operation of Building Bye-laws to regulate or eliminate/erection of outside advertisements/ bill boards/street furniture;
  - Whether any relaxation, modification, alteration or variance of any of the Building Bye-laws is called for;



- Any other issues as may be required from time to time during the course of scrutiny of development permissions and in overall interest of heritage/conservation;
- Guidelines that are to be adopted by those private parties or public/ government agencies who sponsor beautification schemes at heritage sites;

- To prepare guidelines that are to be adopted by private parties or public/ government agencies who sponsor beautification schemes at heritage sites;
- To prepare a supplementary list of heritage sites, which include buildings artifacts, structures, streets, areas, precincts of historic, aesthetic, architectural, cultural, or environmental significance and a supplementary list of natural feature areas of environmental significance, scenic beauty.
- To frame special regulations/ guidelines for precincts and if necessary for natural feature areas as well.
- To prepare special designs and guidelines/ publications for listed buildings, control of height and essential façade characteristics and other heritage items of the buildings and to suggest suitable designs adopting appropriate materials for replacement keeping the old form intact to the extent possible;
- To appear before the Government either independently or through or on behalf of the Commissioner, MCD/ Vice-Chairman DDA/Chairman, NDMC in cases of Appeals under DDA/MCD/NDMC Act in cases of listed buildings / heritage buildings and listed precincts/ heritage precincts and listed natural feature areas.

Recent projects that have been cleared by Heritage Conservation Committee include DGS&D office building at Akbar Road, several renovation works being carried out in commercial buildings in Connaught Place, and National War Memorial.

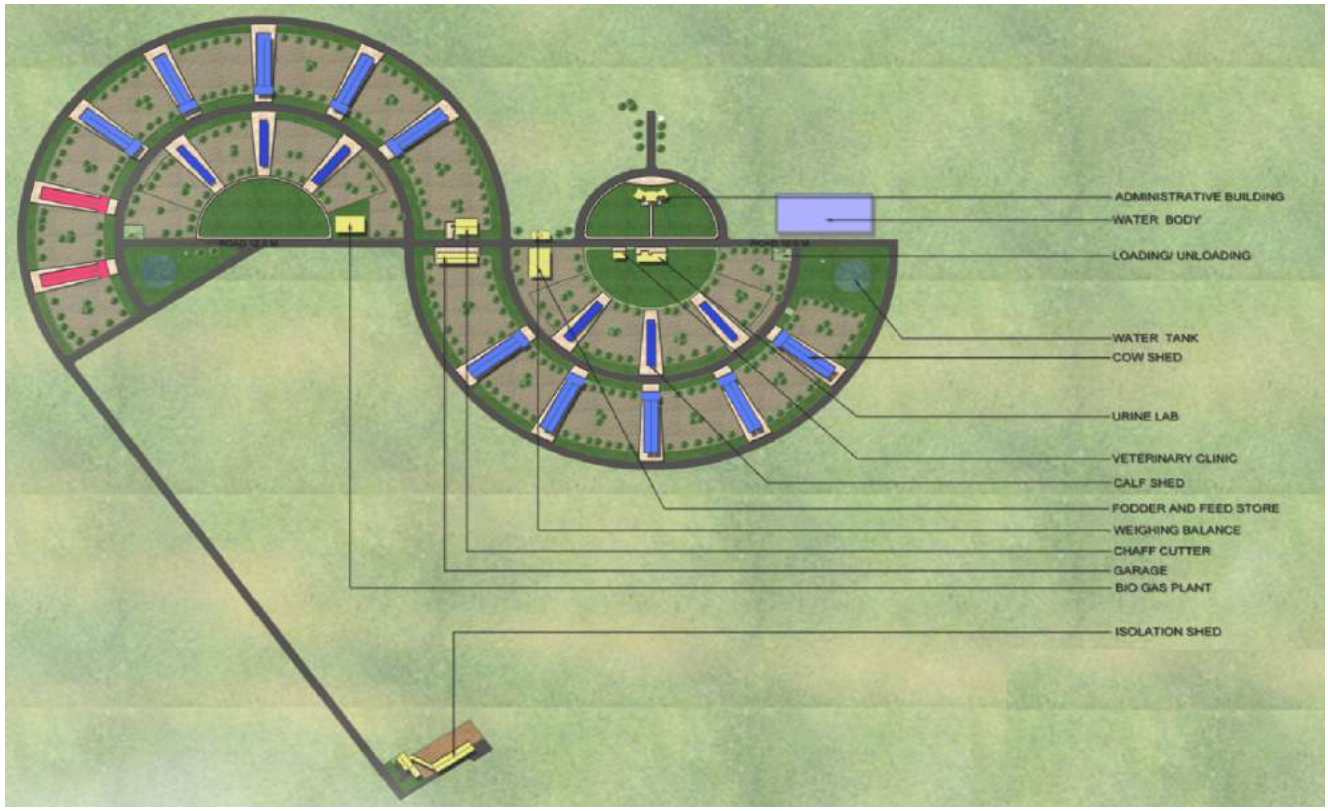




"The issue with design comes when we try to relate design with theory and get stuck in the rigidity of structure."

-BV Doshi

NATIONAL KAMDHENU CENTRE AND GOKUL GRAM

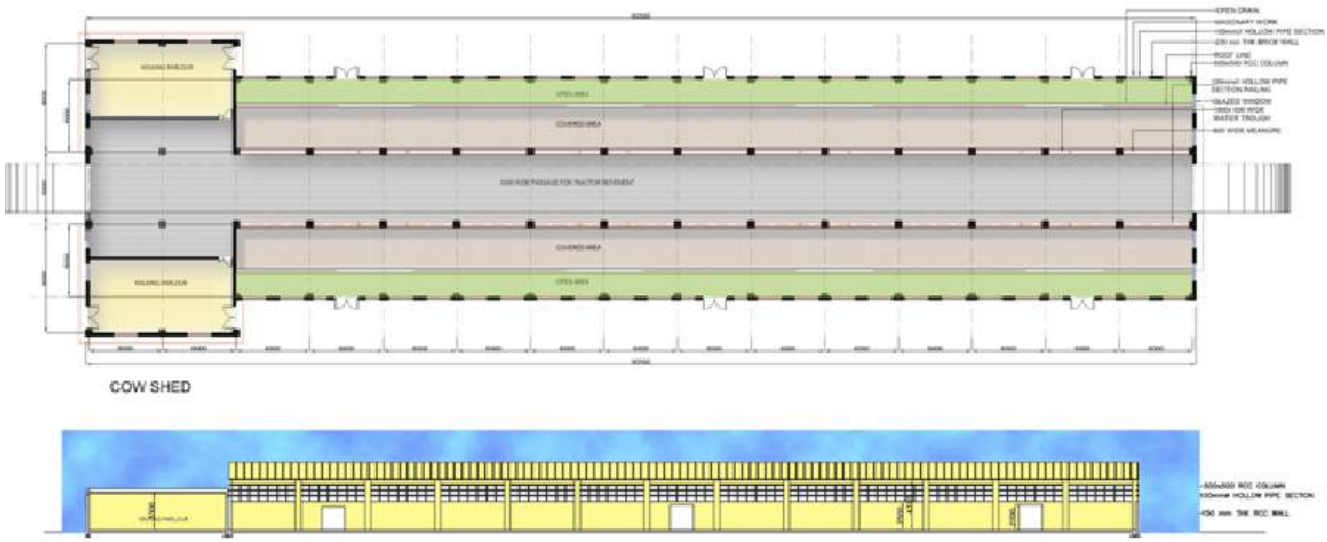


Kamdhenu Centre Layout Plan

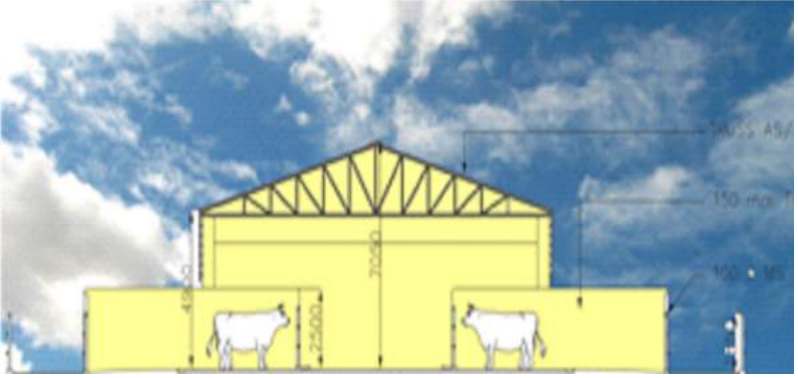
Client : Ministry of Agriculture and Farmers Welfare

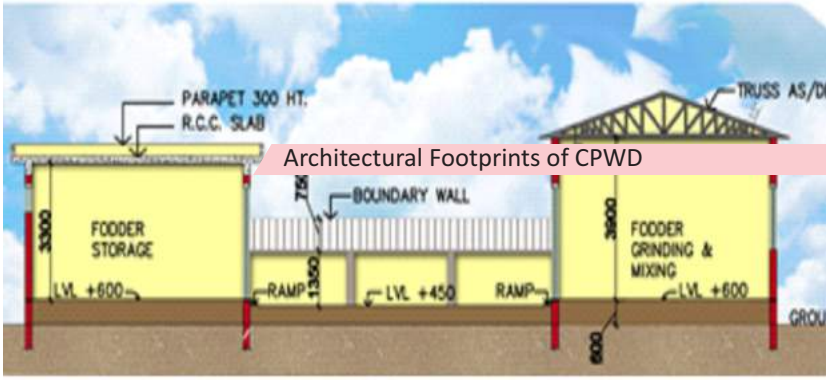
Area : 10,000 Sq M

No. of floors : G+3 Floors



Plan and Sections of Cow shed



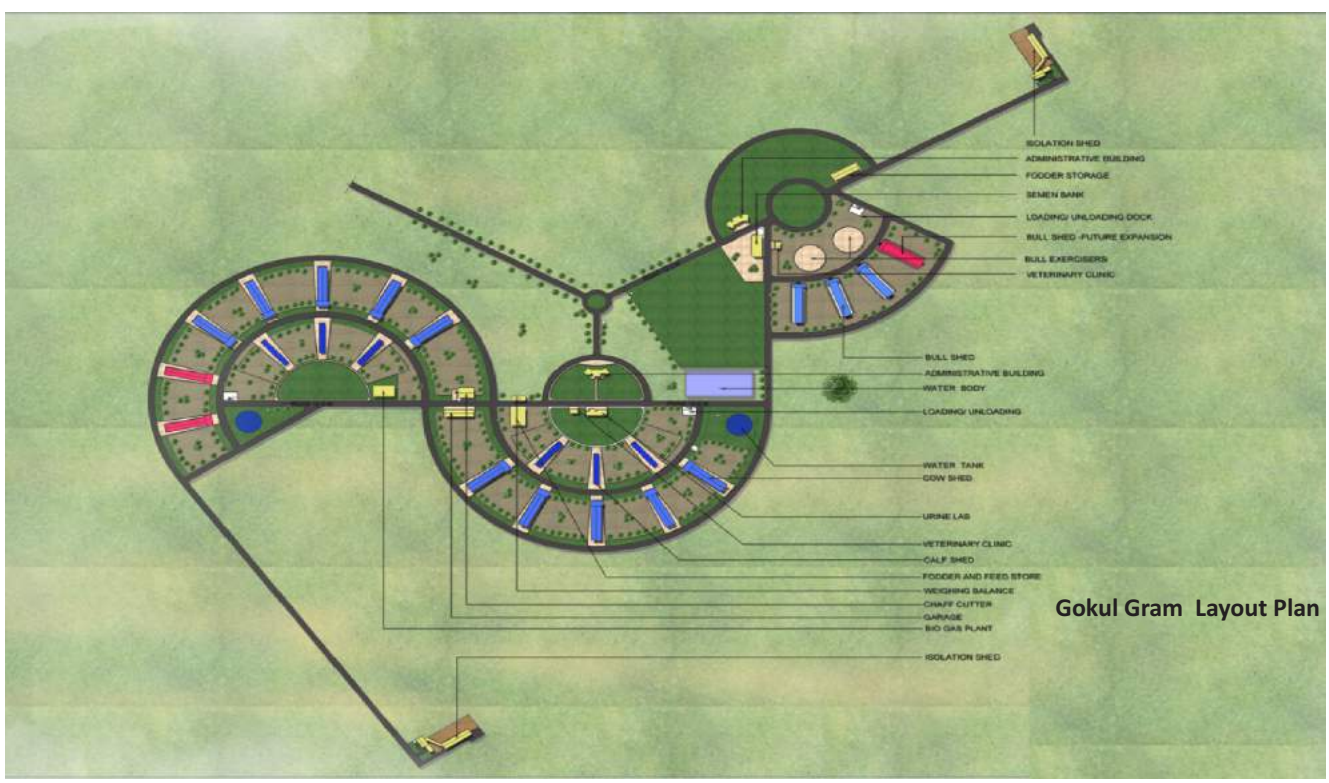


Sections of Cow shed

Like GPRAs, certain projects are required to be developed all over India. National Kamdhenu centre and Gokul grams is one such project of this year i.e.2018. Preliminary design of these kind of projects is dealt at Delhi to save time, energy , visits for carrying out study of similar type of project and huge amount of interaction with the client . For these kind of projects, a prototype study is carried out by visiting similar kind of existing project , discussion with client for carrying out modifications in requirements and design as per latest trends and technology. Preliminary design is then developed after frequent interactions with client department, modified if required and approval obtained from client. This approved design is then sent to the concerned chief architect for further developing by incorporating any minor changes due to local conditions. This helps in reduced interaction and fast disposal of the project.

Design Philosophy:

- Circular orientation generates focal points which make it convenient to keep vigil over cattle.
- Layout developed so as to create flexibility in adding or reducing the number of sheds.
- Maximum open space with minimum intervention for the breed stock to exercise and give a healthy produce.
- Centralized location of amenities to maximize efficiency and reduce workforce.



Gokul Gram Layout Plan

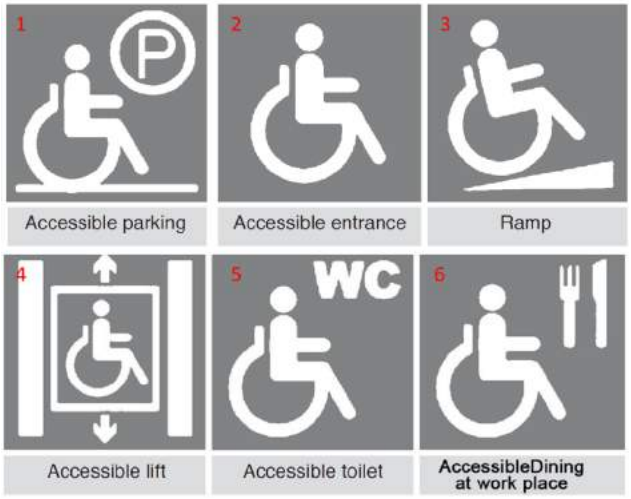
SUGAMYA BHARAT ABHIYAN

India is a Signatory to The United Nations Convention on The Rights Of Persons With Disabilities (CRPD) 2008.

Hon'ble Prime Minister Shri Narendra Modi launched the Accessible India Campaign (Sugamya Bharat Abhiyan) in Dec. 2015, for achieving universal accessibility for persons with disabilities.

Persons with Disabilities Act, 1995 was enacted on 1st January, 1996.

- CPWD Architects were the pioneer to publish the 'Guidelines and Space standards for Barrier Free Built Environment for Disabled and Elderly Persons' in 1998, which became a benchmark in barrier free design.



Features of Barrier Free Built Environment

- 'Handbook on Barrier free and accessibility' as a Modified volume brought out in January 2014, by CPWD Architects.
- 'Harmonized guidelines and space standards for barrier-free built environment for persons with disability and elderly persons' was published by MoUD in 2016 with contribution from CPWD Architects.



National CPWD Academy, Ghaziabad, MoHUA, has been selected as National Resource Institution for capacity building in conducting access audit of building by Ministry of Social Justice and Empowerment and has imparted training to 165 Engineers/Architects on accessibility audit of Buildings and declared them as BASIC ACCESS AUDITORS.

CPWD undertook the task of making all existing central government buildings under its maintenance completely accessible by providing bare minimum barrier free design features like:



1. Earmarked parking bay for differently abled persons just near to entrance.

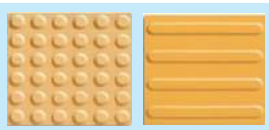
- Bay size 3600 x 5000mm,
- Just near (not more than 30m) to entrance
- International symbol of parking
- Unhindered path leading to entry ramp.

2. Providing tactile pavers

- Providing tactile Pavers of size 300x300mm



Guiding Tile (300X300)

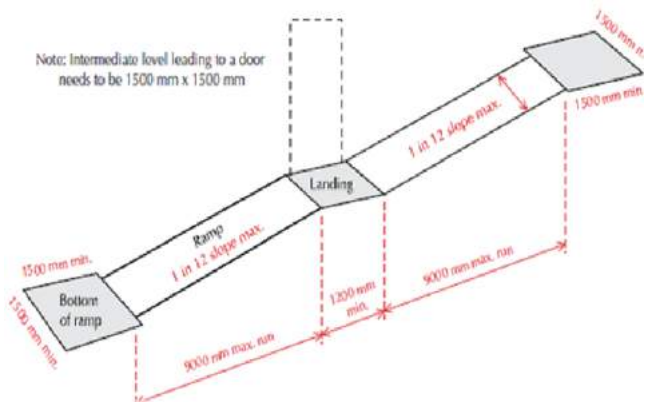


Warning Tile (300X300)



3. Ramp at entries

- Ramps at entries 1200 to 1800 mm wide.
- Gradient of 1:12.
- Handrails at two levels 760 and 900 mm.
- Max. length not more than 9 m.





4. Lifts as per prescribed guidelines

- Lift car to have grab bars
- Door opening not less than 900 mm
- Audio announcement with visual display Inside the lift car
- All lift control buttons with Braille



5. One toilet (unisex) on ground floor

- One unisex toilet on ground floor
- Grab bars
- Low height washbasin without vanity
- Low height/tilted mirror
- Automatic flushing systems.





6. Staircases with continuous handrails on both sides and step's edges to be in contrast color with no open riser

7. Reception counter lowered to 800mm

- At least part of counter lowered to 800 mm



8. Drinking water point lowered to 700mm



Architectural Design Projects

SUPREME COURT BUILDING, NEW DELHI



Source: Google maps

The main block of Supreme Court building was built on triangular plot of 17 Acres and the building was designed by **Chief Ganesh Bhikaji Deolalikar** was the first Indian to head CPWD and designed Supreme Court Building in an Indo – British style. The foundation stone of the Supreme Court Building was laid by the first President of India, Dr. Rajendra Prasad on 29th October 1954. The broad decision taken at the highest level in 1956 was that the 'Supreme Court Building should be constructed in the triangular plot on Hardinge Avenue opposite Hardinge Bridge in conformity with wishes of the Prime Minister, the Home Minister, Minister of works, Housing and Supply and Chief Justice of India". Subsequently, the area has been rechristened and now the building is surrounded by Tilak Marg in the West, Mathura road in the East and Bhagwan Das Road in the South and Tilak Bridge in the North. The design of the building itself is in the shape of a balance with a pair of Scales of Justice. Dr. Rajendra Prasad the first president of India on 4th August 1958 while opening the new building of the Supreme Court said – "I do not think it will fall to the lot of any of my successors to declare open such a 'Temple of Justice'. This noble edifice has been conceived and planned by Engineers and Architects who were trained in their profession according to western standards. The architecture and construction of Building bear testimony of their western experience and skill of high order and they have combined with it our conception of justice. Traditionally we look upon justice as a pair of scales the two pans of which have to be held evenly without allowing the beam from which they hang to incline to one side or the other. We see two wings on the two sides. At the end of each wing is a semi circular structure. They represent the pans which are attached to the beam at the top. This beam accommodate the Court rooms.



The Central beam from the ends of which the scales hang, comprises the Chief Justice's Court at the Centre with two Court halls on either side. The right wing of the structure consists of the Bar room, the offices of the Attorney General and other Law officers and the library of the Court. The left wing consists of offices of the Court.

A black bronze sculpture of 210 centimeter height of MOTHER AND CHILD was installed in lawn of the Supreme Court on 20 February 1978. It portrays Mother India in the form of the figure of a lady. The lady is sheltering the young Republic of India represented by the symbol of a child, who is upholding the laws of land symbolically shown in the form of an open book.



Black bronze sculpture MOTHER AND CHILD

The design of Dharma Chakra Logo of The Supreme Court is reproduced from the wheel that appears on the abacus of the Sarnath Lion capital of Ashoka with 32 spokes. The inscription in Sanskrit "yatodharmastato jayah" means – Truth alone I uphold. It is also referred to - as the wheel of righteousness, encompassing truth, goodness and equity.



Dharma Chakra Logo

VIGYAN BHAWAN, NEW DELHI



The Vigyan Bhawan building was designed in 1955 by R.L.Gehlote of Central Public Works Department (CPWD), incorporating elements of British Raj architecture, evident in the nearby buildings of the Secretariat Building and of Lutyens' Delhi along with Hindu and Mughal architecture, as well as ancient Buddhist architecture, The main feature of the complex is the Plenary hall, with a seating capacity of over 1200 delegates. Besides ,it has six smaller halls with capacities ranging from over 65 delegates to over 375 delegates. The building also has a VIP Lounge, the Office block for on-site offices, secretariat and a documentation centre, a Studio, a Business centre and an Exhibition hall. The adjacent building is called the Vigyan Bhavan Annexe added later on with four Committee Rooms and a separate Media centre. The annexe also houses the Ministry of Development of North Eastern Region (MDoNER) of Government of India. The Vigyan Bhavan Annexe stands adjacent to the Vice President House.



Entrance Gate

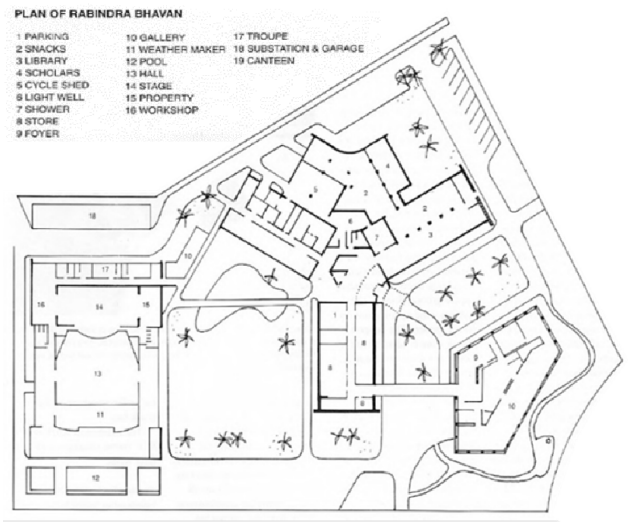


Plenary hall

RABINDRA BHAWAN, NEW DELHI

Designed by the Chief Architect, CPWD, Habib Rehman in 1961, this building houses the functions of three academies : Sahitya Academy, Lalit Kala Academy and Sangeet Natak Academy. The objective of these academies is to encourage and promote their respective arts.

The site measures 3 Acres and is located at the corner of Copernicus and Ferozshah roads, with a frontage to both of them.







Views of the Academy building, showing the use of stone, jalis, overhanging roof, running louvers and fire brick.

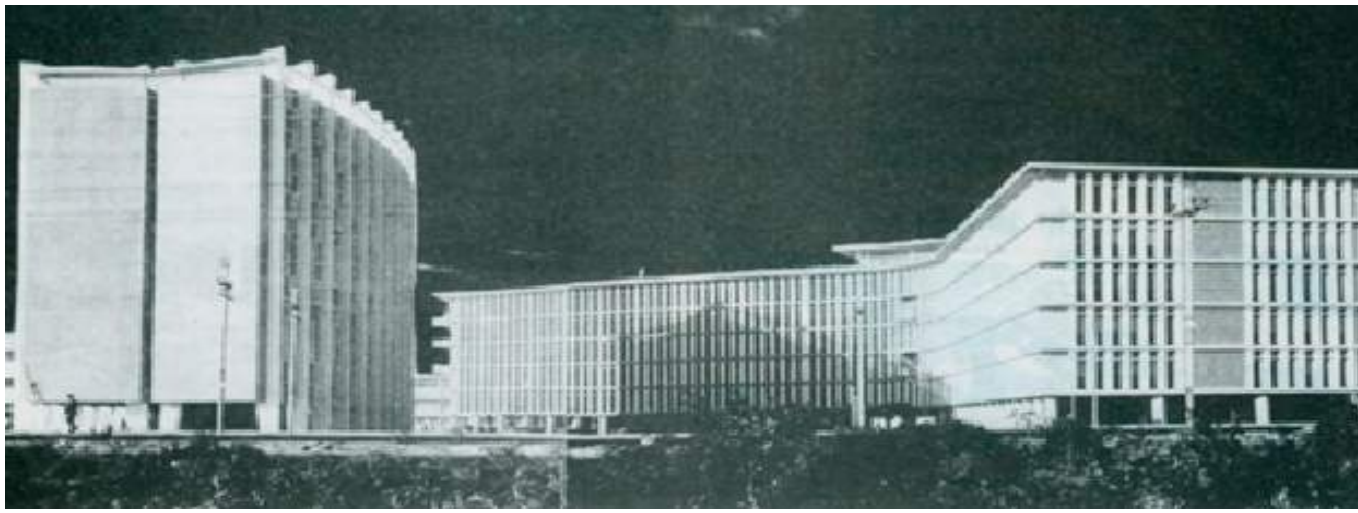
The design solution consists of the administrative block with three wings of more or less equal length at an angle of 120 degrees to each other and a pentagon shaped exhibition block the form of which follows the curve of the traffic island.

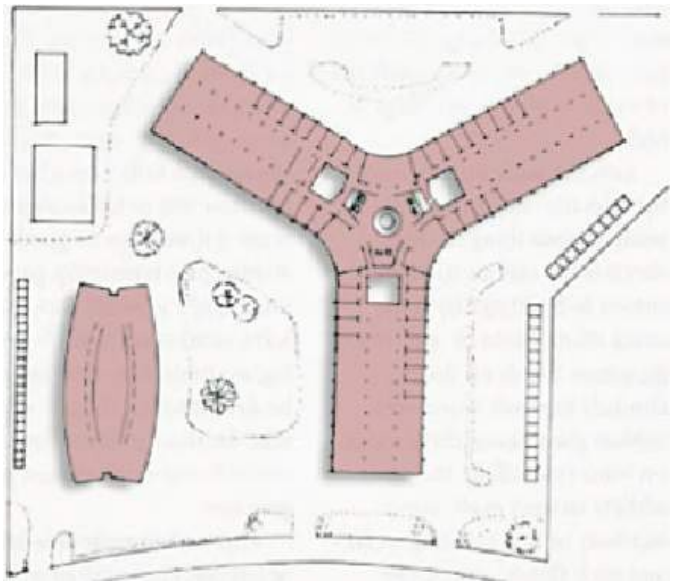
Each 4-storeyed wing of the administrative block houses an academy, the Lalit Kala being in the wing nearest to the exhibition block to which it is connected by a covered walkway. The main entrance in to the administrative block is where the three wings meet. The entrance hall, lift and staircase are placed here, though each of the three wings have their own staircase for internal vertical circulation.

A large library on the ground floor of the Sahitya wing opens out on to the garden. The Sangeet Natak wing is adjacent to the site of the proposed theatre. RCC sunshades in two continuous rows over all the windows have been provided, the lower row in each case being placed on cantilevered brackets so that it is away from the wall and is no obstruction to breeze. sun shades are designed to eliminate the strong morning and afternoon sun.

Information sourced from Architecture + Design , Mar- Apr 1996 issue

INDRAPRASTHA: Y SHAPED BUILDING, DELHI





Indraprastha Bhawan consists of two independent blocks of contrasting design. An eight-storeyed block with a plan resembling a drum(Mridangum) was originally designed to house UN Agencies offices. Its structural columns are expressed as bold vertical lines projecting out of the curved exterior walls. The windows between these columns are staggered on alternate floors to create an interesting pattern. The ground floor is kept entirely free for parking of cars and scooters.

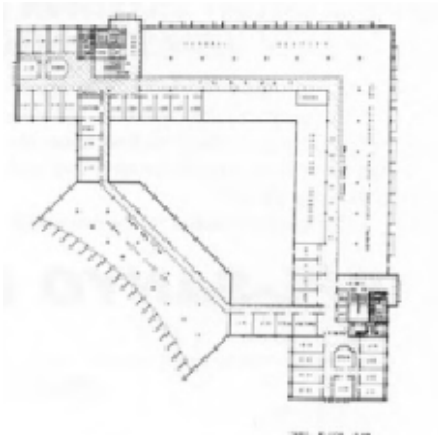


DAKTAR, NEW DELHI

Designed in 1954 to house the GPO and the Posts and Telegraphs Directorate, this building has a façade which follows the curve of Patel chowk. The main lobby level contains the public post office area with one long curved counter.

The roof of the back section of the building has open verandas and covered terraces with staff lunch rooms, a library and recreation hall.









NEW SECRETARIAT, CALCUTTA



The West Bengal Government's new Secretariat on Hastings Street, Calcutta, has been planned according to the modern trend in designs of office buildings and architecture such as the United Nations Headquarters in New York and the Ministry of Education building in Rio de Janeiro. Taking greatest advantage of the site and orientation, the building has been designed in three blocks to create a pleasing composition. In order to obtain uniform illumination and maximum ventilation the blocks have been made comparatively narrow. Horizontal and vertical louvers have been used on the east, west and south side of the blocks in order to cut down glare and prevent direct sun rays coming into the room.

WESTERN COURT ANNEXE AT JANPATH, NEW DELHI



Site Photograph

- **Cost** : Rs 80.45Crores
- **Area of the plot** : 7.72 Acres (31,278 sqm.)
- **Total built Up Area** : 9219 Sqm
- **Number of Floors** : 2B+Ground +3 Floors.

Design Philosophy :- Western Court at Janpath, New Delhi was built pre-in
a hostel for legislative councillors of Imperial Delhi. It is a Grade II heritage
bye-laws, scope of changes in Grade II-A is limited to internal changes by a
to strict scrutiny. In Grade II-B, in addition to above, extension or additiona
same plot or compound could be allowed provided that extension or adc
is in harmony with the existing heritage building(s) or precincts especi
height and facade. Accordingly, design of new constructed 4-storied A
reflects the built form of the existing building in terms of linear planning, s
storeys , classical character of the building and green ambience.

Within height of 3 floors of existing building, new construction has been d
Two basements are provided to cater to parking requirements of ex
constructed building with some surface parking as well.



Ground Floor Plan



Site plan



Design of Unit



Model Photograph

PARLIAMENT ANNEXE, NEW DELHI





- **Cost** : Rs 262 crores
- **Area of the plot** : 39495 Sqm
- **Total Built Up Area** : 39352 Sqm
- **Number of Floors** : 2B/B+G+2/6 Floors.

Design Philosophy :- Extension to Parliament House Annexe building, a well organized contemporary transformation of British Classical landscape in to state of art office complex, using species of different climate zones. The building has 2 main blocks, A block is a ceremonial block comprising of 4 committees rooms, Banquet hall, VVIP rooms and Auditorium. B Block is a high rise block for offices of chairman and their committee offices. .It is a Green building with 4 star GRIHA rating. It has provision for solar power generation and provides easy access to the persons with disability.



Democracy Wall opposite VIP Ramp



Art work in Double Height Atrium



Committee Room A - Block



B - Block



Pergola Connecting Block A & Block B Block

JAWAHARLAL NEHRU BHAWAN AT NEW DELHI



- **Cost** : Rs 232 crores
- **Area of the plot** : 7.785 Acres (31,504 sqm.)
- **Total Built Up Area** : 59475 Sqm
- **Number of Floors** : B+Ground +3/5 Floors.

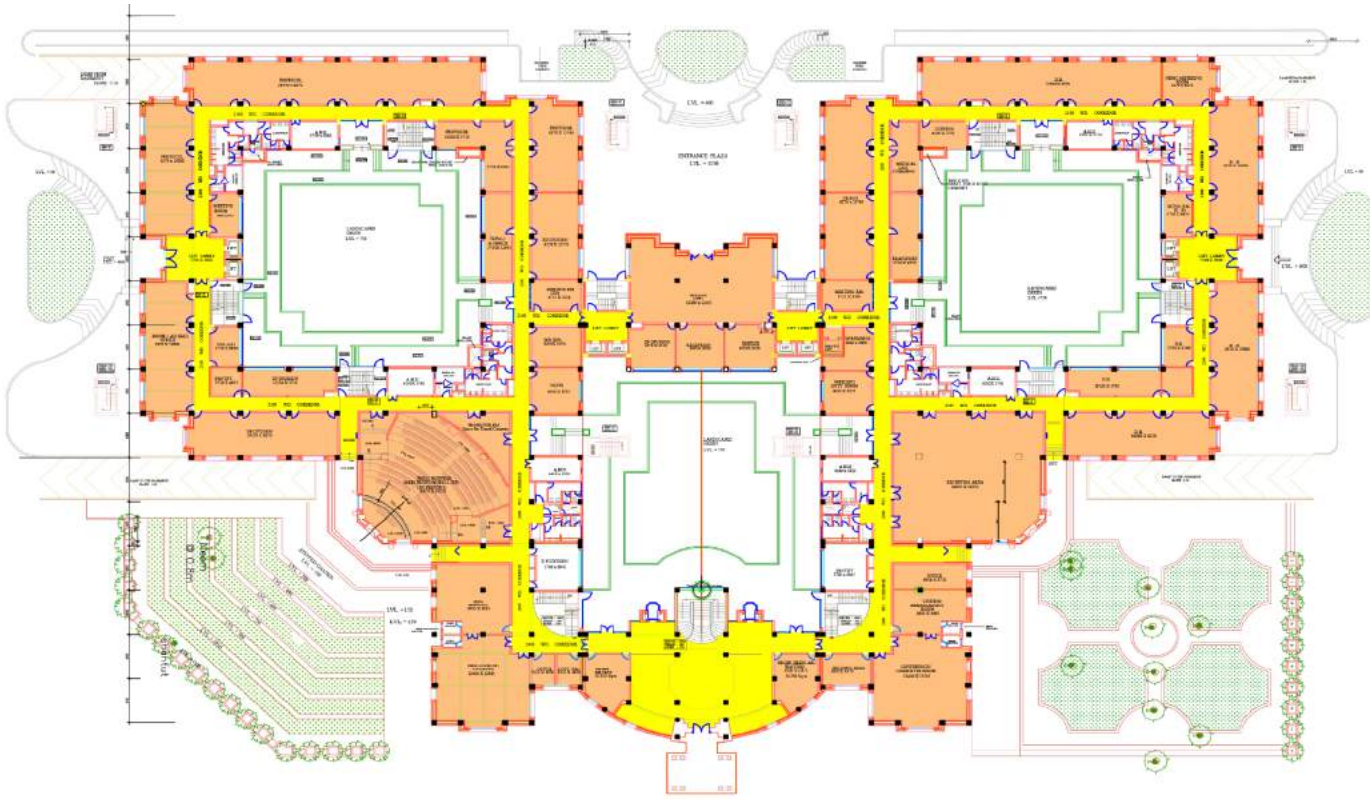
Design Philosophy :- Jawaharlal Nehru Bhawan, the headquarters office building of the Ministry of External Affairs at Janpath, New Delhi, is a contemporary state-of-the-art building in complete harmony with its environment and Sir Edwin Lutyen's architecture in surrounding area . It is the first ECBC compliant Green Building with Certification of 5 Star GRIHA rating. The building has three main blocks, four distinct zones, with separate entrances but inter-connected through corridors and beautifully landscaped courtyards.



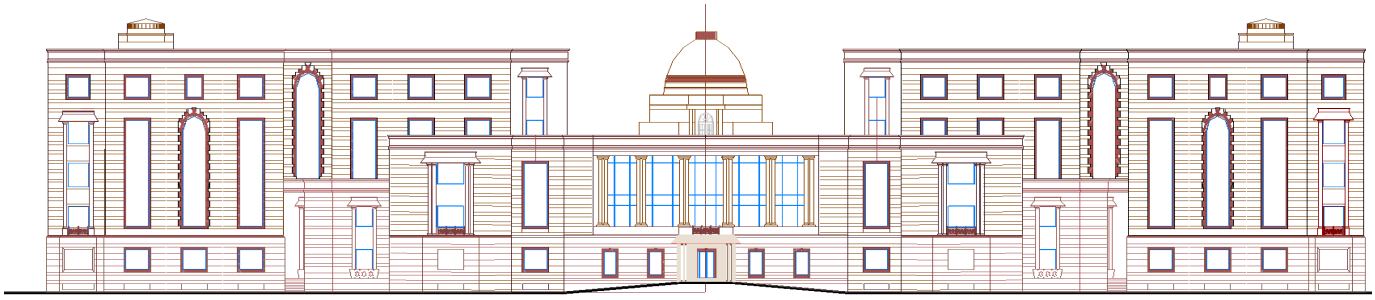
Conference Room



Dinning Room



Ground Floor Plan



Elevation



Landscape of lawns



Vertical Landscaping feature

INDIRA PARYAVARAN BHAWAN, NEW DELHI

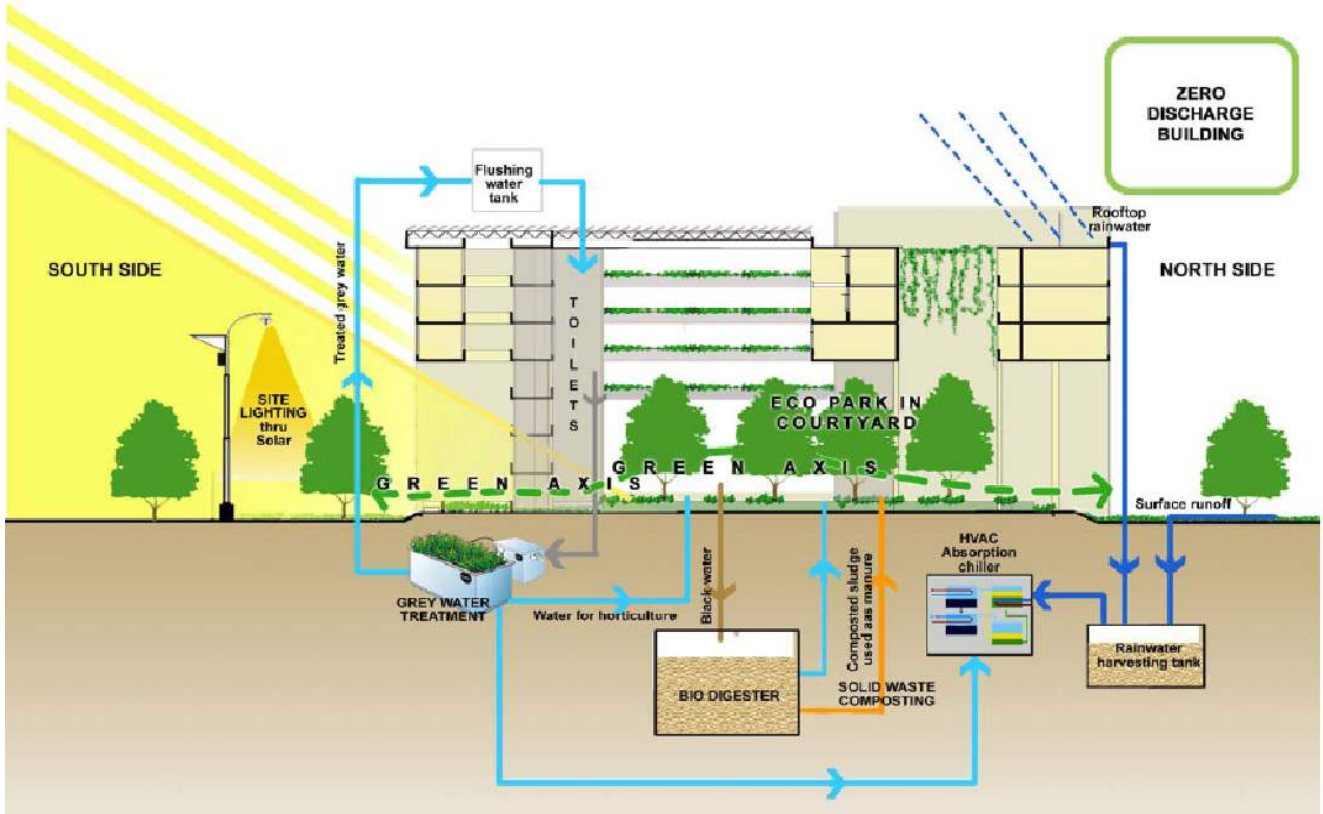


Photograph of Model

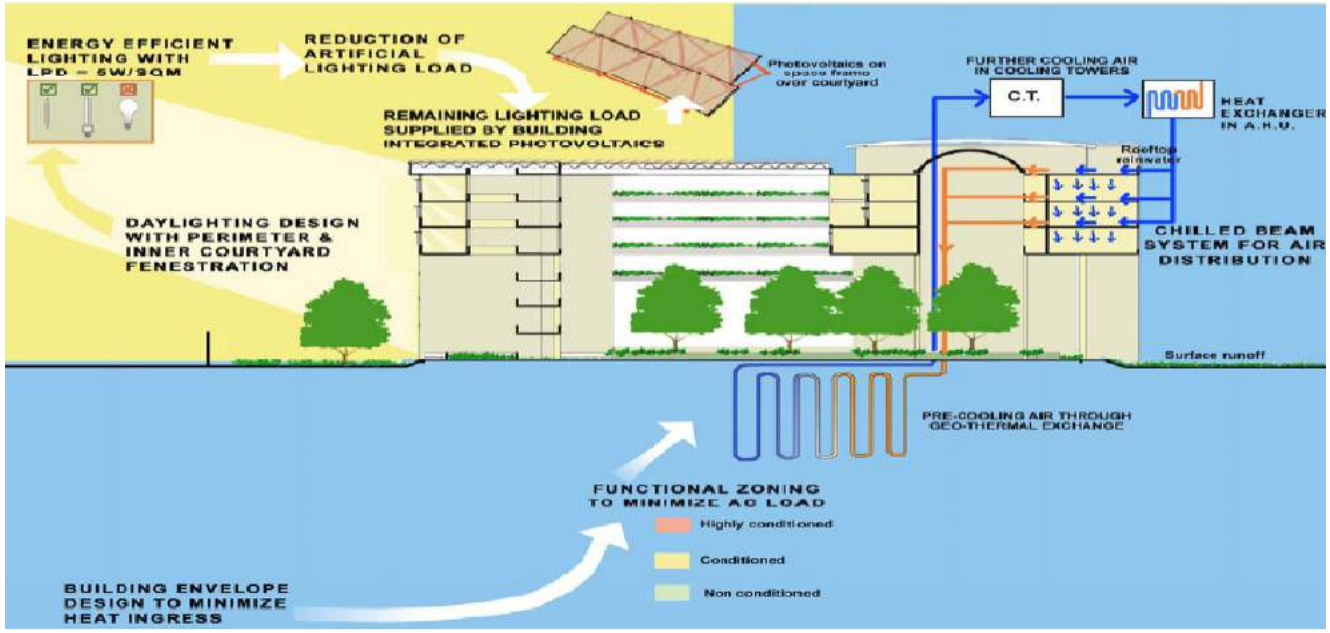
- **Cost** : Rs 201.49 Crores
- **Area of the plot** : 9565.13 Sq m
- **Total Built Up Area** : 30914 Sq m
- **Number of Floors** : 3B+ Ground +6/7 Floors.

Design Philosophy :-This building is India's first ever "Net Zero Energy Multi storeyed Building with 100% onsite renewable (Solar) Power generation" over and above its highest green ratings i.e. GRIHA 5star and LEED India Platinum. With a Solar Power system of installed capacity 930KWp the building is also the largest roof top Solar system in Multi storeyed buildings in India.

Total energy savings achieved in this building is about 40% and savings in use of water is about 55% . Against the conventional energy demand of 22 lakh units per year for this building, actual energy demand is brought down to only 14 lakh units per year by several energy conservation and sustainability measures.



Site and Water Management Strategies



Energy Conservation Measures

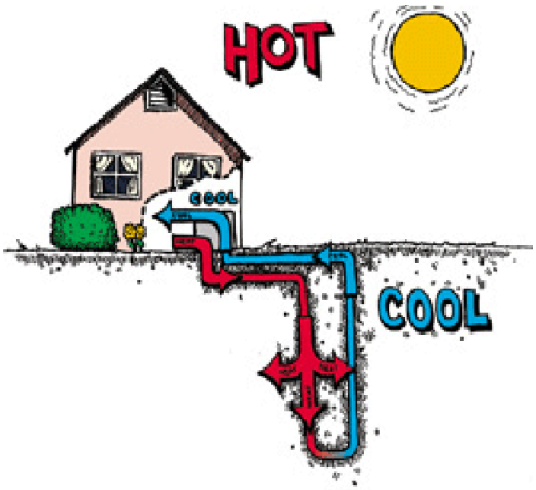
This entire energy demand of 14 lakh units, is being generated through highest efficiency monocrystalline solar PhotoVoltaic (SPV) panels, located at rooftop. Energy generation using this system was started from 19.11.2013 and is being fed to NDMC grid from where supply is being taken, thereby offsetting the total energy demand.

The entire central courtyard had to be covered with space frame in order to create the total required area of 6000 m^2 for supporting solar panels, Additionally, MS supporting structure over the terrace had to be extended further by huge cantilevers and at terrace level and fourth floor level on Southern side.

This building has many other rare features like Chilled Beam system of HVAC, Geo Thermal Heat Exchange system, Regenerative Lifts, Fully Automated (Robotic) Car Parking in basements with Zero surface parking, apart from several other green building features.

Special Provisions

- Solar Passive Architecture.
- 930 KWP Rooftop Solar Power Plant.
- Geo thermal Heat Exchange system below ground.
- Chilled Beam System for Air Conditioning.
- LED Fixtures, occupancy and daylight sensors.
- Robotic Car parking in basements.
- Energy saving regenerative lifts.
- Low discharge water fixtures.
- Eco Friendly Landscaping with no hard paving, eliminating heat island effect.
- Fly ash based products in construction.
- Modular Furniture and work stations.
- Audio Visual systems in Conference halls.
- Sewage treatment Plant 30KLD capacity.



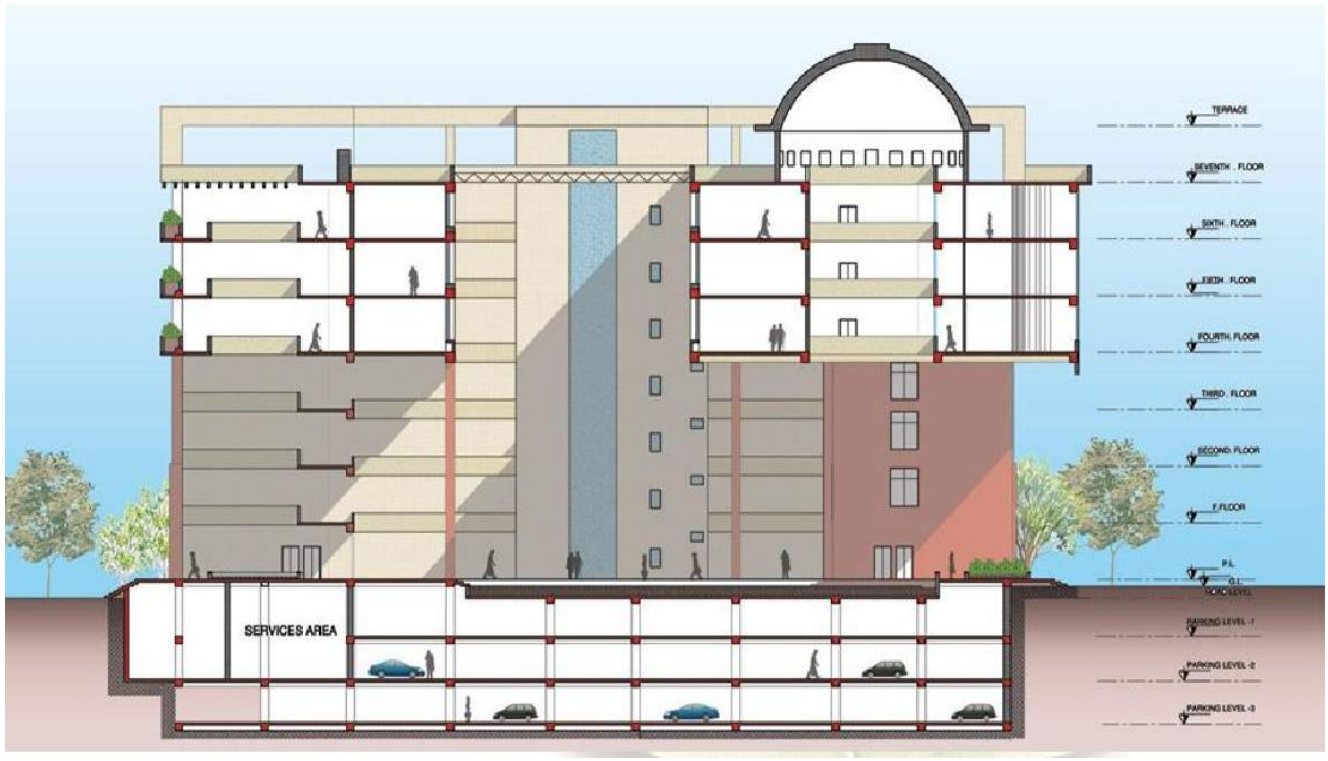
Geo thermal energy based system



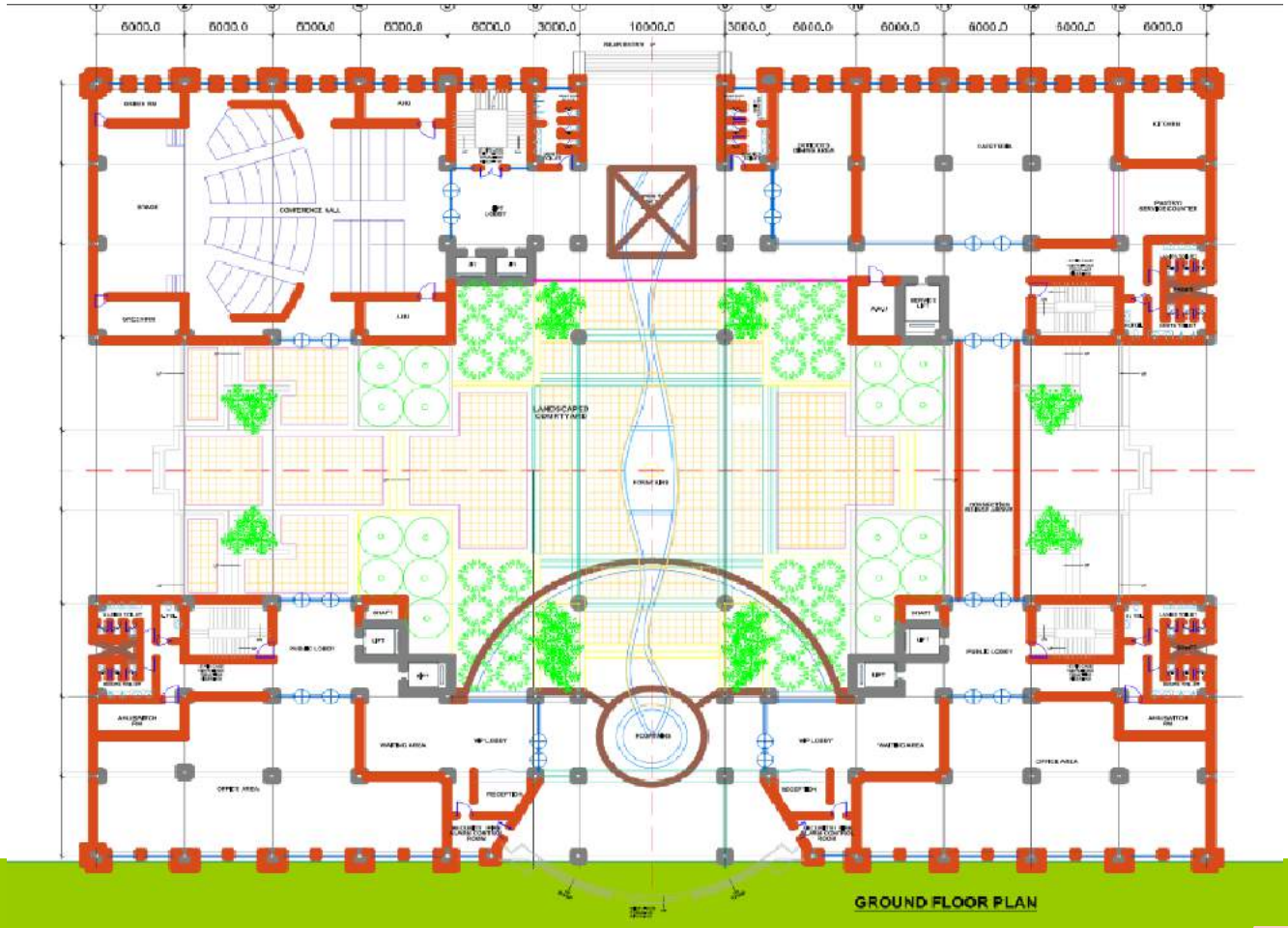
Roof Plan



Solar Panels used on roof top



Section



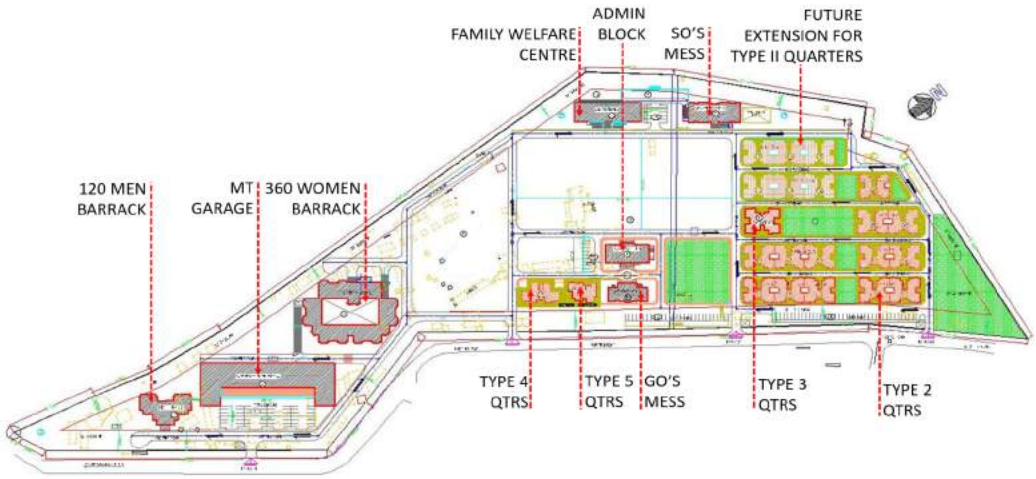
GROUND FLOOR PLAN

PROPOSED CAMPUS FOR "88 MAHILA BATTALION" SECTOR-8 DWARKA NEW DELHI



- **Cost** : Rs 140 Cr. (Phase 1)
- **Area of the plot** : 80466.91 Sqm
- **Total Built Up Area** : 467456.31 Sqm
- **Number of Floors** : Ground + 4Floors.

Design Philosophy :- The main purpose of the project is to provide housing facilities for 88, Mahila Battalion personal and have provision of basic infrastructure services like roads, sanitation, water supply and power supply. The project design concept ensures unobstructed views of scenic landscape. The blocks are oriented in order to reduce the heat gain through building envelop and also mutually shade each other. Development of green belt is of immense importance, as it will not only act as pollution sink for dust emissions, gaseous pollutants and noise pollution but also enhances the visual appearance of the developed site. Necessary provisions for barrier free movement of physically handicapped, such as ramps, railings, staircase width, lifts etc. have been incorporated in the design.



Campus Layout Plan







Perspective Views of Type Quarters

BUNGALOW 9(TYPE-8) AT SUNEHRI BAGH, NEW DELHI.



Perspective View

- **Cost** : Rs 5 Cr.
- **Area of the plot** : 6230 Sq.m.
- **Total Built Up Area** : 852 Sq.m.
- **Number of Floors** : Ground Floor

Design Philosophy :- The Bungalow design retains the architectural design, style, elements such as columns and arches, shading devices (chajjas), etc. and color scheme of the earlier bungalows. The 'Lutyen bungalow style' has been maintained as far as possible and at the same time, the design has been modified to meet the modern lifestyles of the residents. The spaces within have a gradual progression from common / transition spaces to semi – private, private spaces. To enhance privacy and security of the residents the office area has not been segregated from the main bungalow. It has been connected to the main bungalow through a covered pathway.

Green Building features such as cavity wall, inset windows, Low-E glass etc has been proposed. Since it is a redevelopment project, the design as well construction of the building follows the sustainable building norms to minimize the impact on the existing ecosystem and optimize resource consumption.



Model Photograph



Ground Floor Plan

NARMADA RESIDENTIAL COMPLEX, PRESIDENT'S ESTATE, NEW DELHI



- **Cost** **:** Rs 13 Crores
- **Area of the plot** : 15102.32 Sqm
- **Total Built Up Area** : 4431.8 Sqm
- **Number of Floors** : Ground+ 1

Design Philosophy: The design is aimed towards minimum environment impact during and post construction. This was achieved by the layout which has the new buildings built on the footprint of the demolished buildings. The natural drainage slopes have also been maintained so as to avoid flooding during rains. The existing trees on site were retained and new trees have been planted in the premises. The design adheres to the LBZ guidelines; more over it has incorporated the Architectural Expression vocabulary and materials of the President Estate, in order to preserve its heritage character which is of national importance.



Type-III Quarter



Site Plan

SCHOOL OF PLANNING AND ARCHITECTURE, VASANT KUNJ CAMPUS, DELHI



Proposed Layout Plan

- **Cost** : 500 Crores (approx)
- **Area of Plot** : 79845.961 Sqm (19.730 Acres)
- **Total Built-up Area** : 1,15,435 Sqm
- **Number of Floors** : Ground + 5 Floors

Design Philosophy :- The new SPA Campus at Vasant kunj provides a remarkable opportunity to create a blueprint for an urban campus for the design economy of the 21st century. The pan recognizes the instituition's long standing reputation as a leader in design education and furthers that by creating a physical framework for it to lead design' social, ethical, and global cause and make a lasting contribution through critical thinking, research and innovation.



Conventional campus paradigm create insular learning environments: a natural setting uncorrupted by the city. The SPA campus, by necessity needs to be integrated with the city. The city shall be its laboratory for learning and innovation. The campus master plan is hinged on three broad principles:

1. Ecological sensitivity towards the site.
2. Connection with the city and beyond.
3. Creating an inclusive, holistic learning environment.

It has features like Interactive spaces/Spill over for students, Defined different zones of Academic, Hostel, faculty and service zone, Flowing green spaces created by courtyards, Cross ventilation, a serene and pleasant ambience for all, Maximum Daylighting in habitable spaces, Barrier free access for persons with disabilities, Green Areas have been developed on terraces, indigenous plants have been used to reduce demand of water in Landscaping, Drip irrigation for green areas and Rain water harvesting etc.

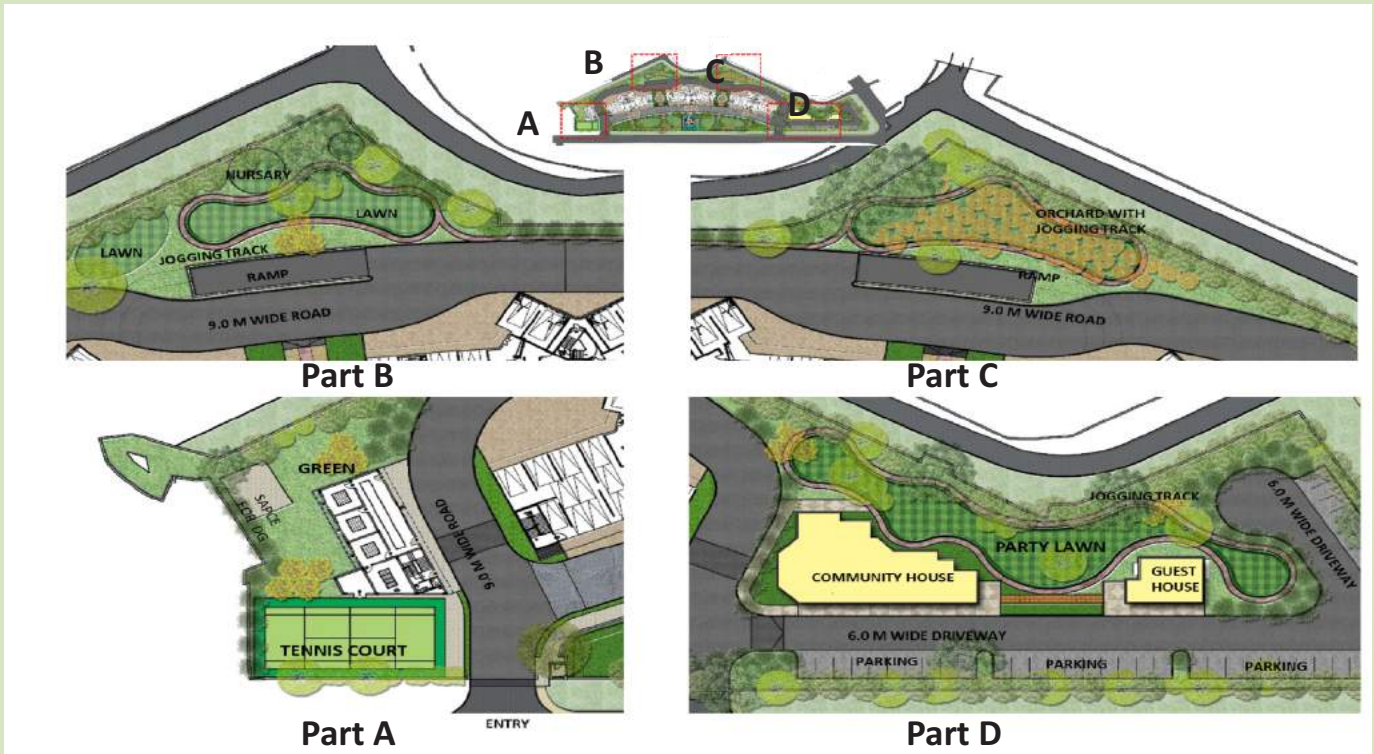


Design Features

MULTI-STORIED FLATS FOR LOK SABHA MP'S REDEVELOPMENT OF DR. B.D. MARG ,NEW DELHI



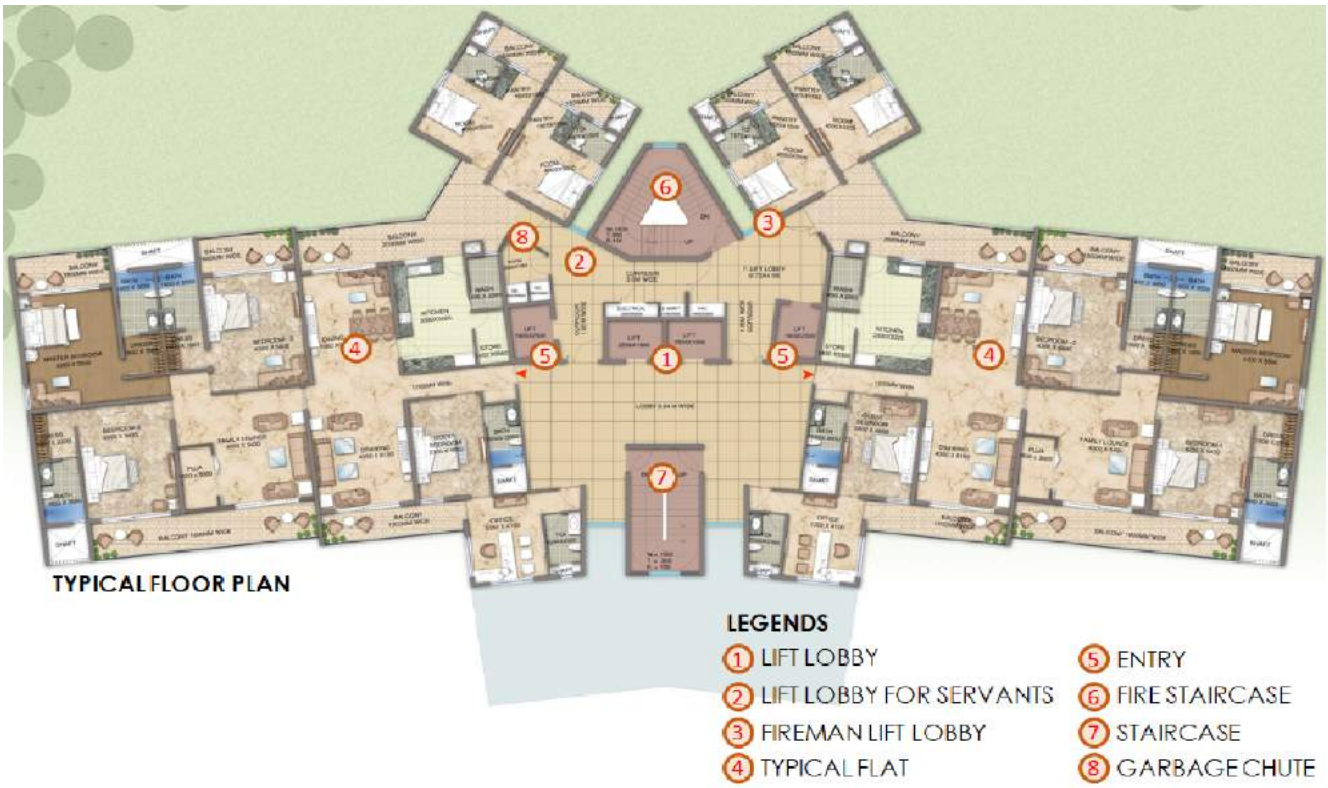
Layout Plan



Part B **Part C**

Part A **Part D**

Landscape Features



Typical Floor plan

- **Cost** : Rs 188 Cr.
- **Area of the plot** : 5.695 Acres
- **Total Built Up Area** : 40,464 Sq m
- **Number of Floors** : Stilt + 13Floors.

Design Philosophy :- The proposed building complex has been designed to be in harmony with the existing Narmada and Kaveri Blocks. The Architectural elements incorporated in the design are similar to the existing MS flats.



REDEVELOPMENT OF NORTH AND SOUTH AVENUE HOUSING, NEW DELHI



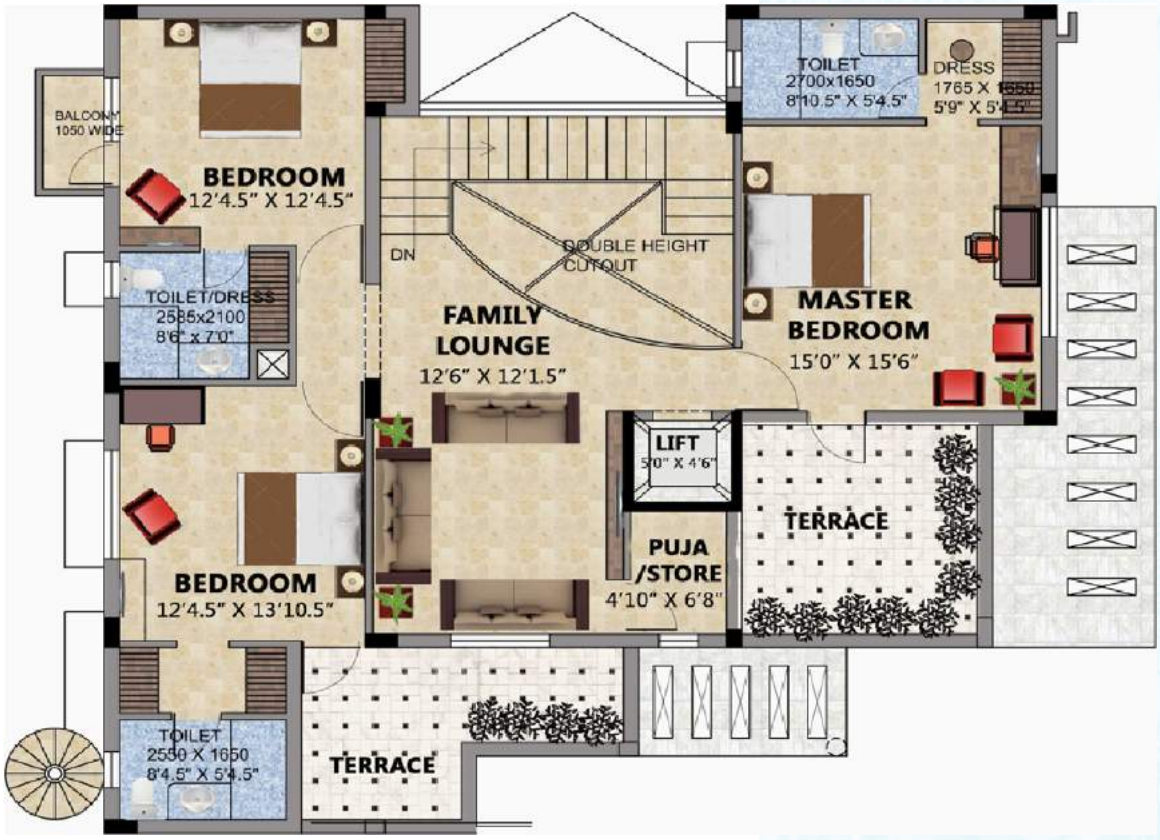
Perspective View

- **Cost** : Rs 92.5 Cr. (First Phase)
- **Area of the plot** : 21 Acres
- **Total Built Up Area** : 15,120 Sq m (First Phase)
- **Number of Floors** : B+G+1 Floor.

Design Philosophy :- The duplex unit is designed with the balance of Lutyen's character and modern architecture. The redevelopment is kept low rise due to close proximity with Rashtrapati Bhawan. The building materials and construction technologies are energy efficient. In phase –i, 36 nos. new flats are constructed in North Avenue after demolition of 64 flats, 47 staff quarters, 9 garages and 3 shops.



Ground Floor Plan



First Floor Plan

NATIONAL SECURITY GUARD (NSG), SAMALKHA, NEW DELHI



- **Cost** : 39.41 Cr.
- **Area of Plot** : 98033.24 Sq. M.
- **Total built –up Area** : 12314 Sq. M.
- **Number of Floors** : G + 3

Design Philosophy:- It is a G+3 storey structure with no basement. The structure has been designed as a combination of four separate building namely 2 barracks, 1 quarter guard, 1 store block and 1 admin building into one, where each has a separate entry in order to save space on ground.

All three blocks are completely segregated by providing separate lifts for each block.



Stone Jaali and Creepers on Terrace



Ground floor plan



Perspective View

Direct view is blocked from the terraces of the barracks by providing stone jali covered with creepers. Fourth floor is completely used for barracks. Lifts and stairs of central block restricted upto third floor only.

VIEWER'S GALLERY AT JOINT CHECK POST, ATTARI, AMRITSAR



Site Photograph

- **Cost** : Rs. 23.98 Crore
- **Area of the plot** : 31,000 sqm.
- **Plinth Area** : Covered Area 8515.12 SQM , Gallery Area 7246.56 SQM
- **Number of Floors** : Ground + 6 Floors.

Design Philosophy:- Project is located at joint check post, Attari (international border between India and Pakistan) Amritsar, Punjab. This check post also serves as a transit terminal between both the countries. Attari lies on the historic Grand Trunk Road which passes through both the countries, India and Pakistan. The border is located 32 kilo metres from Amritsar. the elaborate Attari border ceremony takes place daily at this joint check post, before sunset which is witnessed by thousands of people.

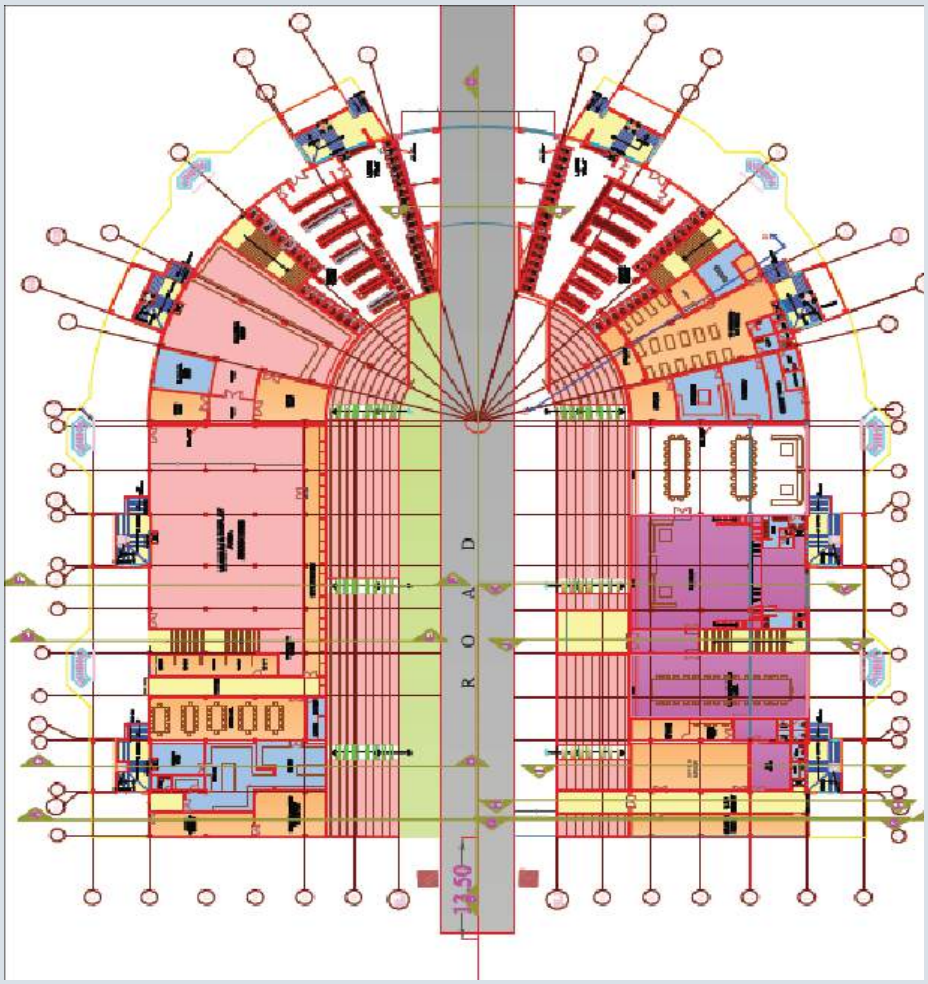


Conceptual View

The proposal for the Viewer's Gallery at BSF joint check post at Attari was conceptualised and finalised by Central Public Works Department in consultation and close coordination with the Ministry of Home Affairs and the Border Security Force. This project has been planned and designed keeping in mind its National importance and National pride. The traditional local architecture of Punjab has been followed in this U shaped gallery.

The design elements like juxta position of two dome shaped Chhatari and flat roof chhatari of varying scale and columns with trefoil arches and stone jaali to give a monumental character. Sada-e-Sarhad bus connecting Delhi(India) with Lahore(Pakistan) can pass through the viewers gallery. The linking node between two countries is visible from both side. Viewer's Gallery accommodates seating capacity of 13525 persons at a time, Museum, Exhibition Space Cum Souvenir Shop, Medical Inspection Room, Lounge, Conference Hall with store and observation room, VIP waiting area, Barracks and Public toilets.

Evacuation of such big number of public is also well thought of with provision of 08 Nos. staircases, 08 Nos. aisles in the Gallery and 04 Nos. of lifts as future provision.



Ground Floor Plan



Site Photograph

NATIONAL INSTITUTE OF DEFENCE ESTATES AND MANAGEMENT, NEW DELHI



Perspective View

- **Cost** : 44.48 Cr.
- **Area of Plot** : 4.0 Acres
- **Total built –up Area** : 6855.9 SQ. M
- **Number of Floors** : G + 2

Design Philosophy:- To create a state of Art and Land Mark Building for NIDEM and to achieve at least three star rated Green Building with the use of Solar passive Architectural design and Harnessing the potential of Renewable Energy with a “Innovative” approach.



Perspective View

ACCOUNTANTS GENERAL OFFICE BUILDING, DEHRADUN



Ground Floor Plan

- **Cost** : 98 Crore
- **Area of Plot** : 29269.88 sqm
- **Total Built up Area** : 21740.56 sqm





Site Photograph



First Floor Plan

Design Philosophy:- Utilizing the shape and topography of the site, a triangular form of building was evolved. The building is designed with bio-climatic features in order to cut the summer sun and allowing winter sun light within the building. The building is designed barrier free and is universally accessible. State of art technology has been used for firefighting along with three separate fire exit staircase for each wing. The building incorporates green features such as solar panels at roof top, energy efficient LED light fixtures, low heat transmitting glass, optimizing daylight window and perforated interlocking paver blocks.

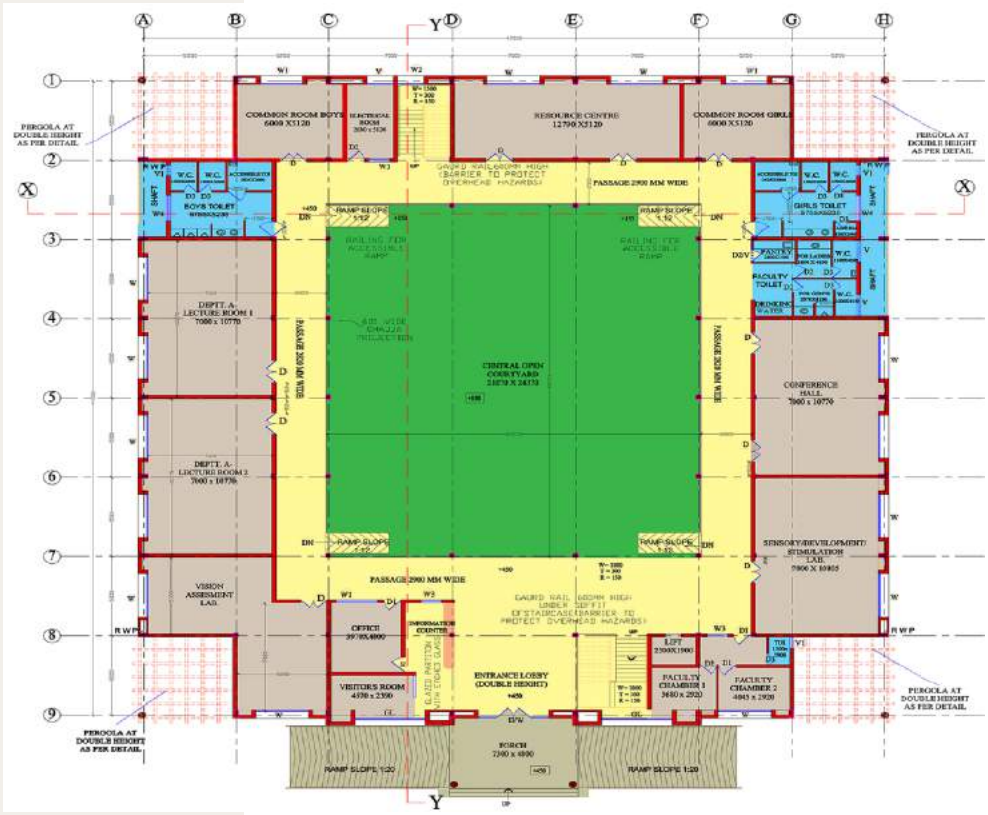
NATIONAL INSTITUTE FOR THE EMPOWERMENT OF PERSONS WITH DISABILITIES, DEHRADUN



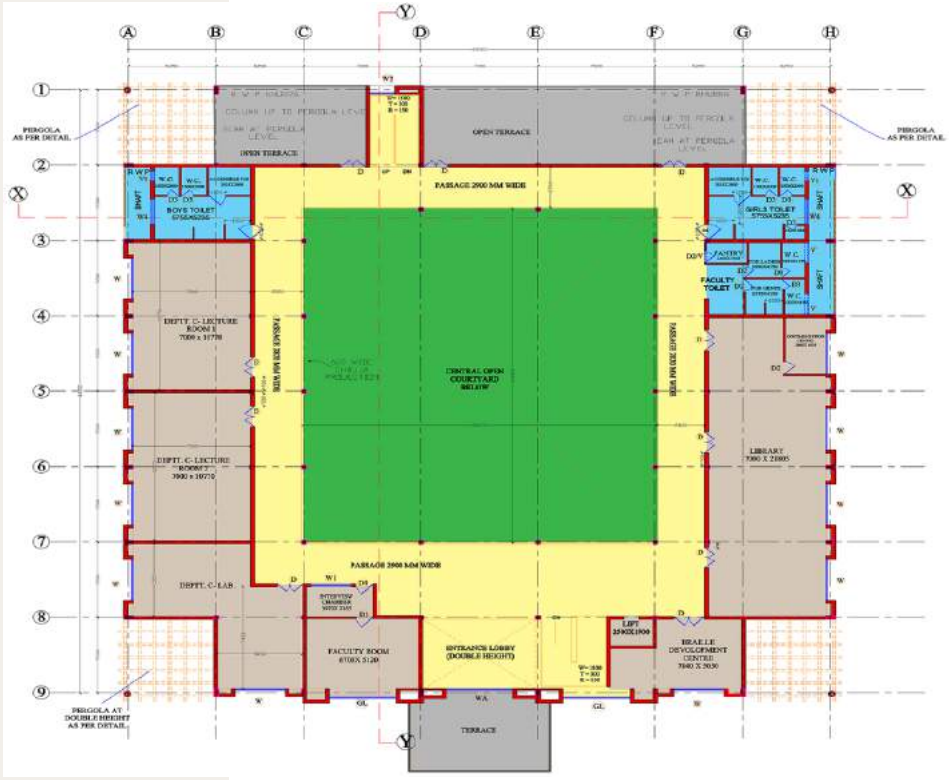


- **Cost** : 8.25 Crore
- **Total Built up Area** : 2295.85 Sqm
- **Number of Floors** : G + 1

Design Philosophy:- The building is designed to cater the academic and administrative requirements of faculty members of NIVH. This two storied building is designed with a central open courtyard having single loaded 2.9 m wide corridor all around to facilitate simulation exercise in courtyard and corridor. Provision of universal accessibility given by using two level handrail, tactile flooring, brail script and lift.



Ground Floor Plan



First Floor Plan

ANTHROPOLOGICAL SURVEY OF INDIA AT SALT LAKE, KOLKATA.

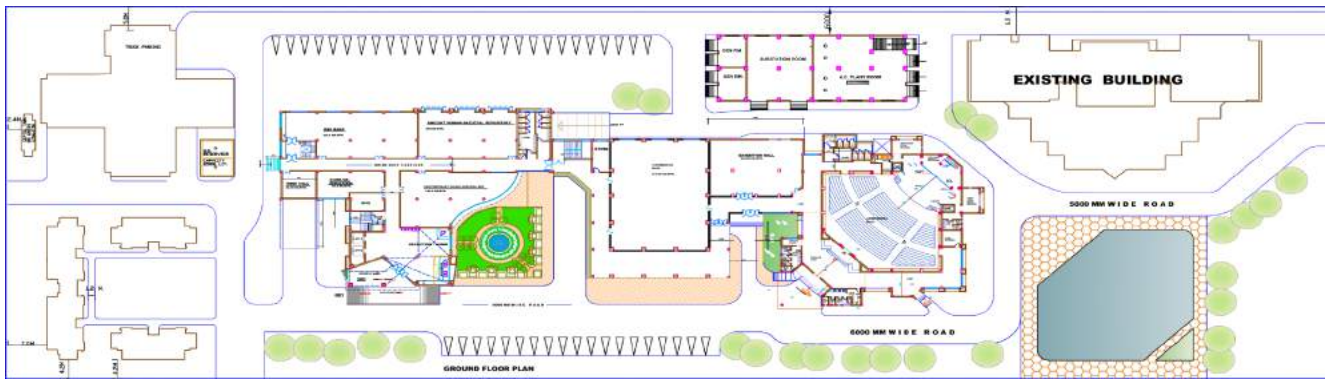


Perspective View

- **Cost** : 60 Crores
- **Plot area** : 20000 Sqm
- **Total built up area** : 13778 Sqm

Design Philosophy:- This B+G+8 storied building has been designed as a barrier free building with entrance ramps, lifts, Green building norms like usage of low-e value glass façade, recessed window, usage of energy efficient fittings, water saving toilet fixtures etc.

To make the external features aesthetically expressive and to match the existing surroundings of the City with the millennium tower at the back-drop, structural glazing, ACP external cladding, modular SS railing, and impressive color scheme have been provided.



Layout Plan

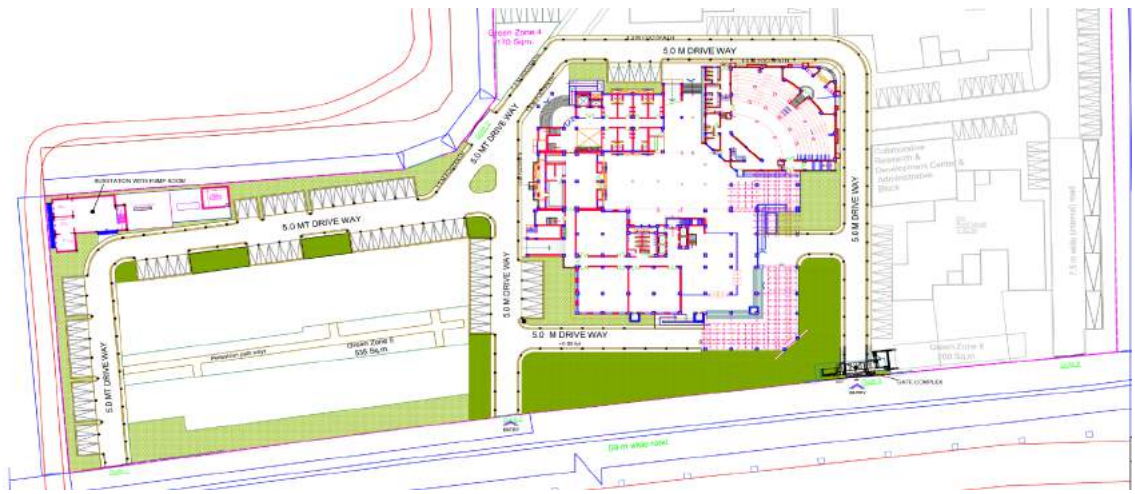
SCIENCE PARK FOR I.I.T. KHARAGPUR AT NEW TOWN, KOLKATA.



Perspective View

- **Cost** : Rs 100 crores
- **Area of the plot** : 40500 Sqm
- **Total Built Up Area** : 80950 Sqm

Design Philosophy:- An Integrated Research cum Administrative cum Guest House with an adjacent 500 capacity auditorium designed around a central courtyard. B+G+9 Storied Complex has been designed with efficient orientation using energy efficient materials, barrier free design considerations, water saving and recycling systems and waste recycling system.



Layout Plan

FOREIGN VISITORS ACCOMMODATION AT IIT KHARAGPUR



Perspective View

- **Cost** : Rs 23 Crores
- **Area of the plot** : Part of Big Campus of IIT
- **Total Built Up Area** : 6737 Sqm
- **Number of Floors** : Ground + 4 Floors.

Design Philosophy:- A premier education and research institute like IIT Kharagpur is a meeting place for great minds to share knowledge and learn through interaction. In Keeping that in mind the foreign visitor's accommodation at IIT Kharagpur is designed not only as a place for temporary stay but also as a place for interaction among scholars.

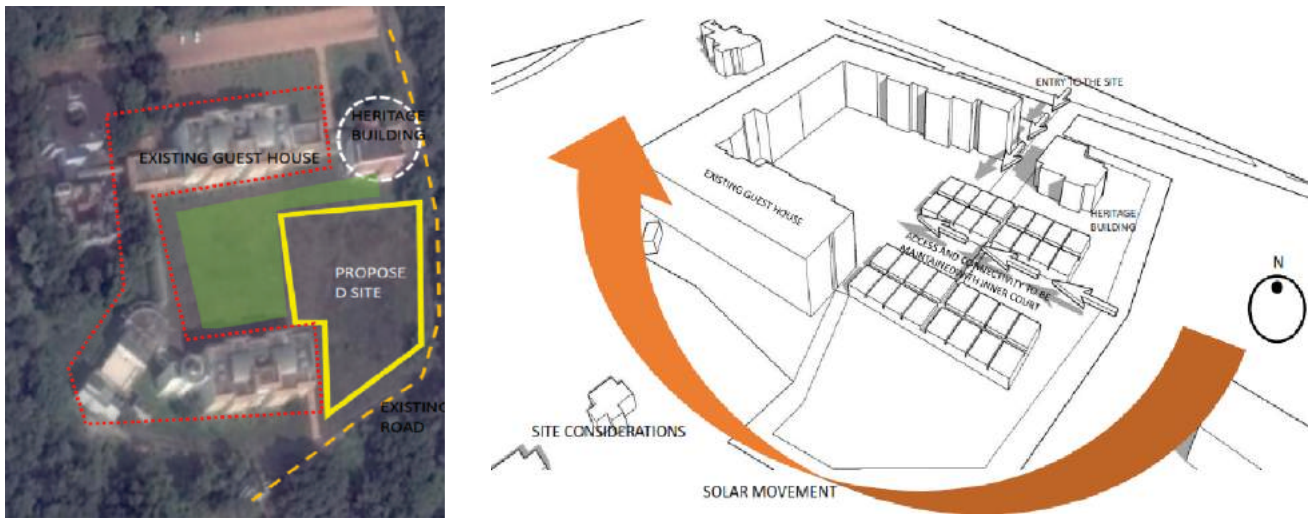
Considering the bioclimatic design principles the building is designed as two parallel wings oriented along east west axis to minimize solar insolation. To maintain privacy the wings are split apart by fifteen meters keeping a green zone in between. A series of terrace takes this green to the topmost floor. Long bridges connect two wings at each floor creating an Inward green zone for casual interaction.



Conceptual View

Each of these terraces are covered with extensive and intensive green roof system which will help to reduce rainwater runoff and heat island effect. Moreover this entire structure is covered with a space frame to reduce solar insolation and thus keeping the space cooler. Meeting the basic requirements the building contains one hundred guest rooms, library, laundry, gymnasium, reception, office, waiting lounge, bicycle parking etc. within floor area of total 6737 sqm.

The facade integrates two wings visually and works as a ventilated double skin system. The layered facade is developed by placing a diaphragm wall 750mm away from the external wall of the building. This double wall system will keep the inner wall shaded and the gap between these two layers will allow wind flow to reduce heat load. Considering the solar orientation the openings on south facade are designed as vertical slits while the north facade has bigger rectangular openings.



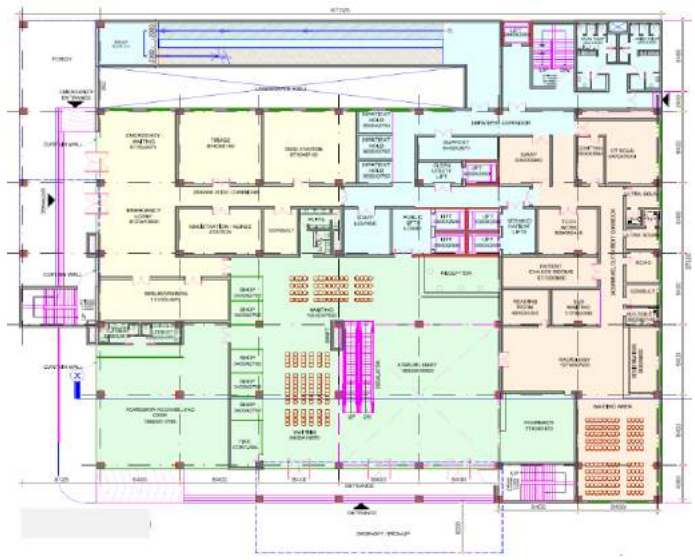
Design Development

240 BEDDED SUPER SPECIALTY HOSPITAL, BILASPUR



Perspective View

- **Cost** : 110 Crores
- **Area of the Plot** : 40 Acres
- **Total built up area** : 3097Sqm
- **Number of Floors** : G+10



Ground Floor Plan

Design Philosophy:- The zoning is developed in such a manner to have maximum day light and ventilation. It is planned to be partially air- conditioned and partially natural ventilation.

The services are well planned in the preliminary stage to cater to all the requirements such as catering unit, HVAC, CSSD, linen store, etc.

The 4 floor high atrium lobby with skylight gives a feeling of openness within the building. It is glazed and hence gives sufficient light in lobby area, waiting and corridors. It has been designed to make it barrier free and accessible.

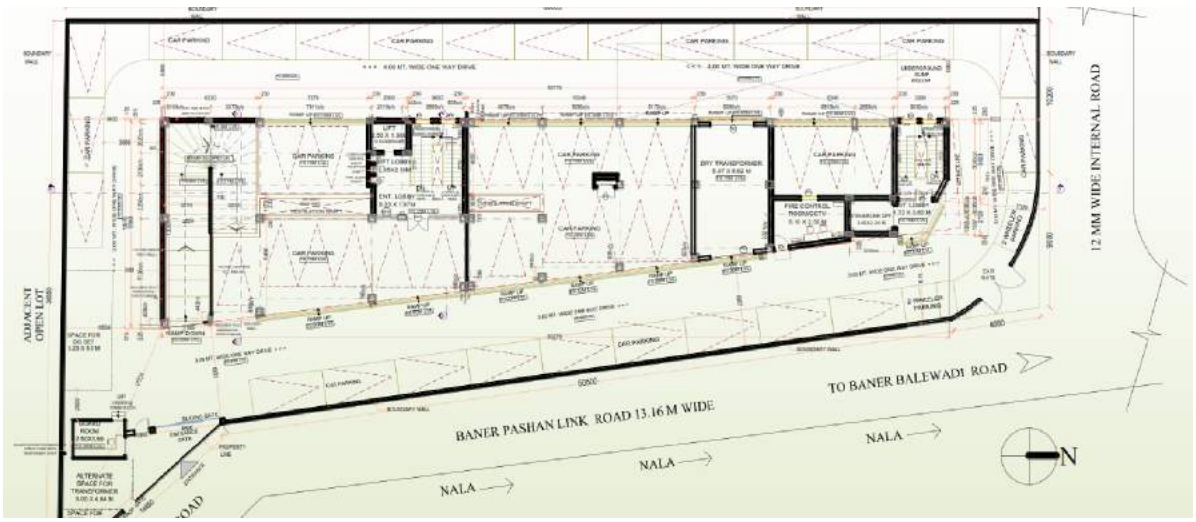
PASSPORT OFFICE AT BANER, PUNE.



- **Cost** : Rs. 17.53 Crores
- **Area of the Plot** : 1602.47 Sqm
- **Total Built up Area** : 2505.39 Sqm
- **Number of Floors** : B+ G + 4 Floors

Design Philosophy:- The plot is a long narrow strip that demands lot of planning techniques. Due to the stringent parking requirement of Pune Local authority and Building requirement from Client dept., car parking is provided in Basement floor and Stilt Floor.

The building facade has been given contemporary look to suit modern building aesthetics with the help of structural glazing and aluminum composite panels. It has Provision for Fire fighting systems and Rainwater harvesting system as well.



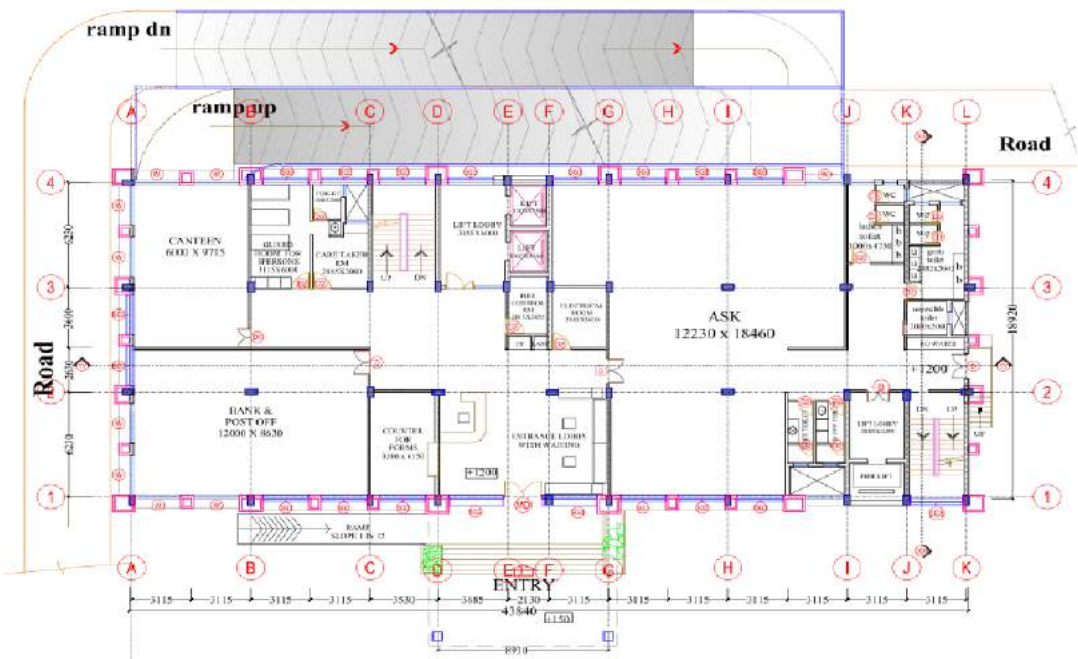
Layout Plan

INCOME TAX OFFICE, BILASPUR



- **Cost** : 68 Crores
- **Area of Plot** : 13071.34 Sqm. (3.23 Acre)
- **Total Built up Area** : 7975.89 Sqm.
- **Number of floors** : 8 (G+7) and 1 Basement

Design Philosophy :- The Income Tax office Building is situated in Tifra, Bilaspur area. Bilaspur has tropical Hot and dry climate, so all windows provided are sunken windows with DGU glass for better energy efficiency and thermal insulation. The elevation is a perfect blend of contemporary and classical elements such as provisions of arch, structural glazing, external cornices etc.



Ground Floor



Site Plan Of Income Tax Office, Bilaspur

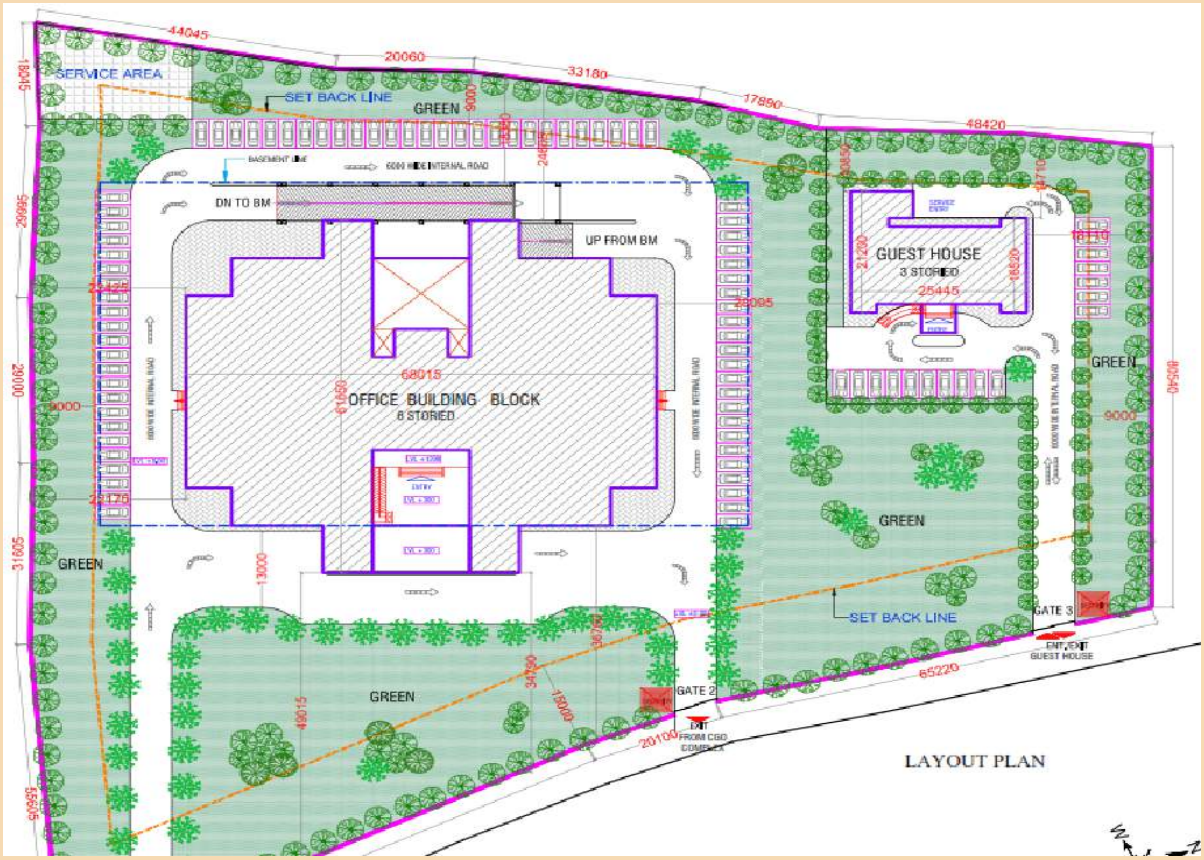
GPOA AT BILASPUR, CHATTISGARH



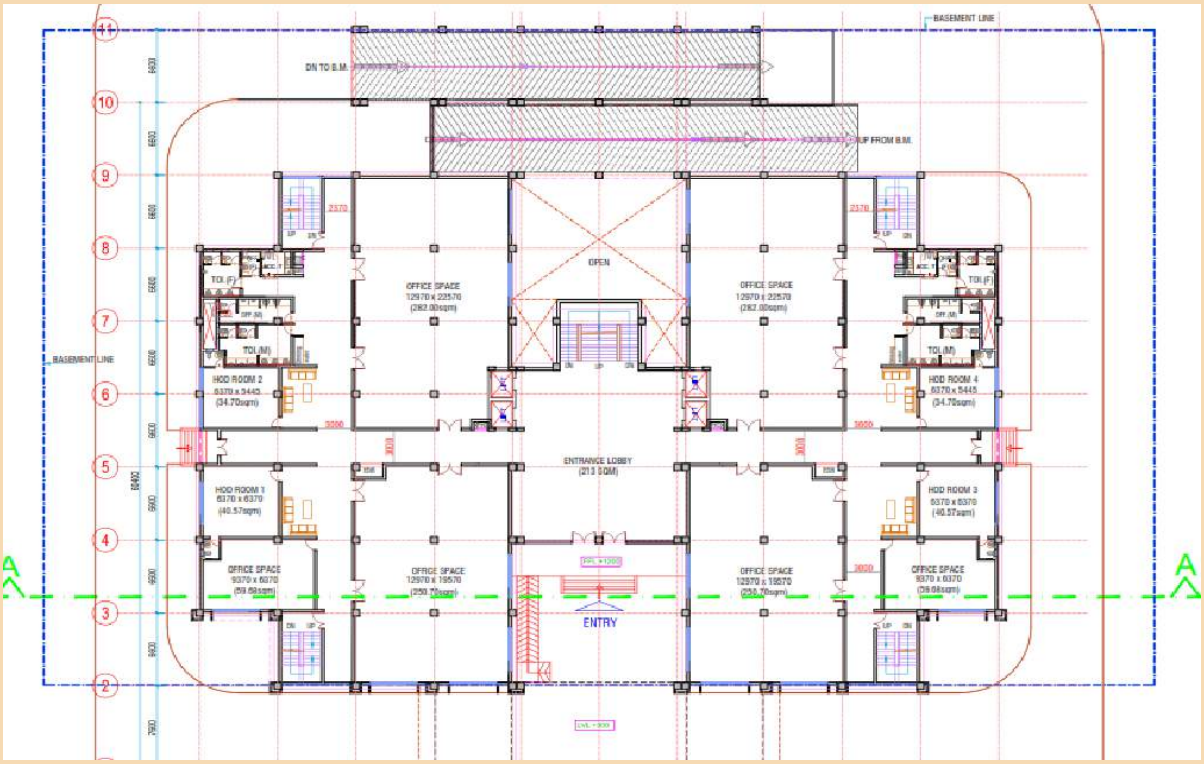
Perspective View

- **Cost** : 105 Crores
- **Area of Plot** : 18928.00 Sqm
- **Total Built-up Area** : 23464.00 Sqm
- **Number of Floors** : B+G+5 Floors

Design Philosophy:- THE GPOA site is situated in Bilaspur. There are two blocks proposed in the site. One for office building and another for guest house. Building is designed for better use of natural light and ventilation to make it energy efficient. Guest house (area 1178sqm) has been designed as a 3 storied (G+2) RCC structure. Bilaspur has tropical Hot and dry climate, so all windows provided are box windows with DGU glass for better Energy efficiency and Thermal insulation.



Layout Plan



Ground Floor Plan

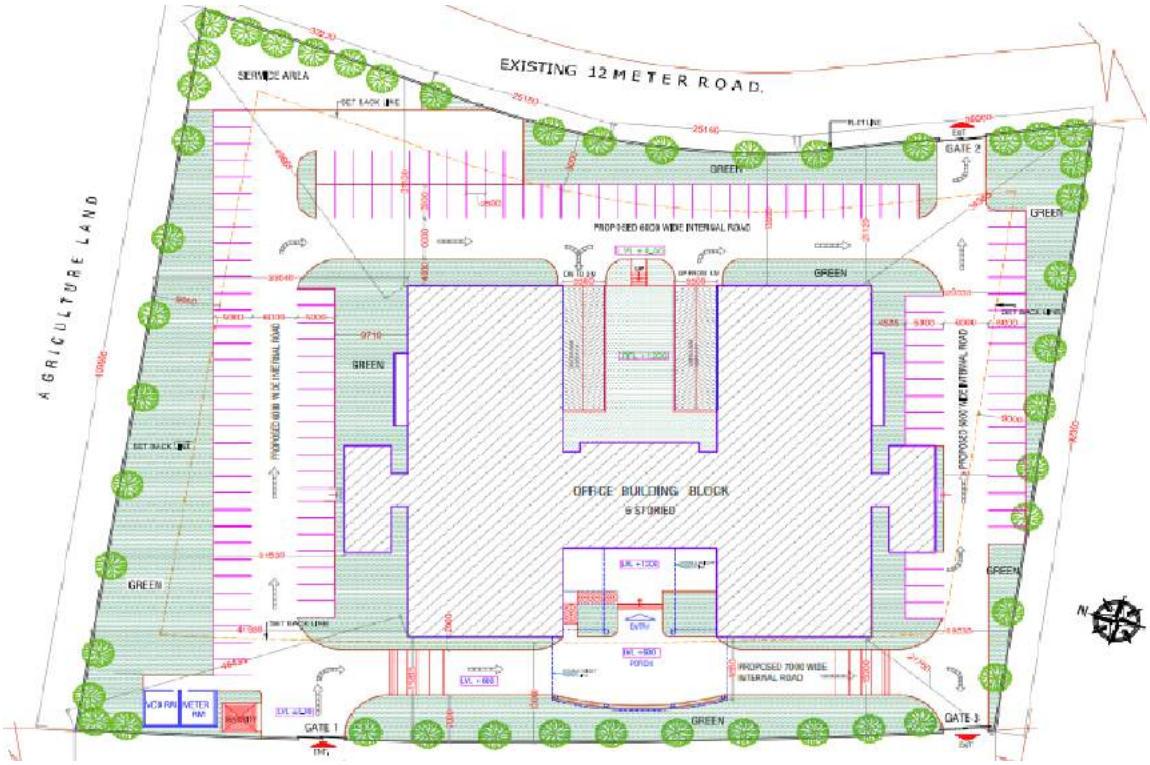
GPOA AT NAYA RAIPUR, CHATTISGARH



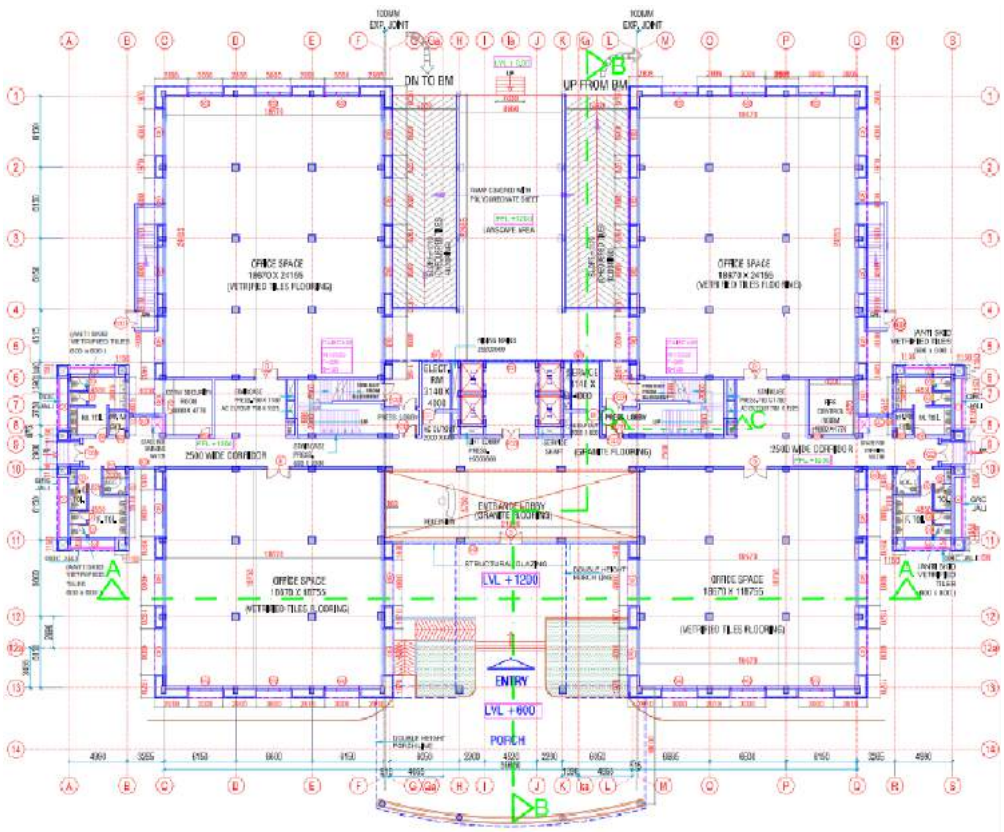
Perspective view

- **Cost** : 72.27 Crores
- **Area of Plot** : 11476.00 Sqm.
- **Total Built up Area** : 14649 Sqm.
- **Number of floors** : B+G+5 Floors

Design Philosophy:- The GPOA building of Raipur is situated in sector 24 Naya Raipur area. The building is designed as a 6 storied (G+5) structure with one Basement (area 3200 sqm.) H – shape has been adopted for better use of natural light and ventilation to make it energy efficient. All floors are well lighted and ventilated. Because of being in tropical wet and dry climate, all windows provided are sunken with DGU glass for improved energy efficiency and thermal insulation. VRV system is provided for air conditioning in all floors. For fire fighting, sprinkler system, wet Riser and fire escape staircase has been provided. Space frame provided at the top of the building to tie-up the building blocks.



Layout Plan



Ground Floor Plan

GPRA AT NAYA RAIPUR, CHATTISGARH



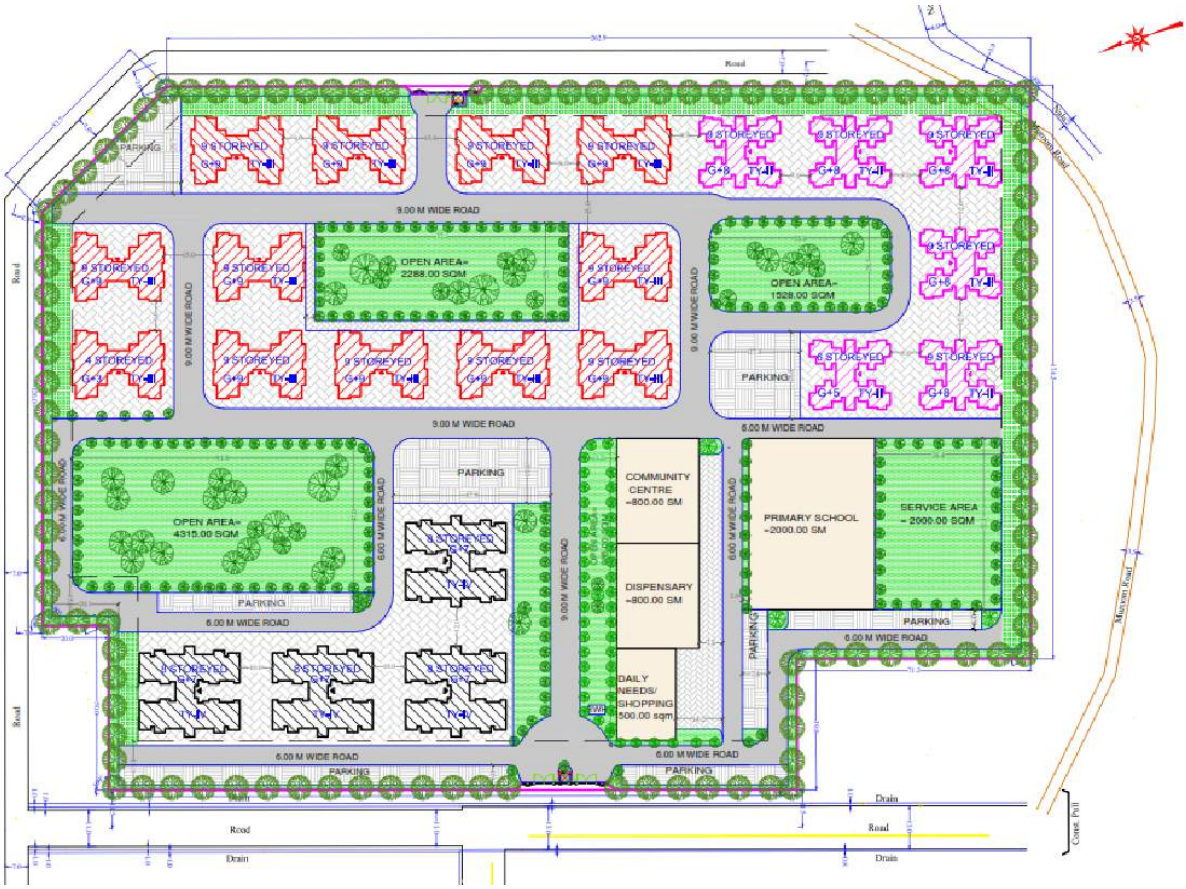
Site Layout View - Plot 'A' (Ty-II,Ty-III and Ty-IV)

- **Cost** : 308.86 Crores
- **Area of Plot** : Plot 'A' = 59837 Sq m , Plot 'B' = 18407 Sq m
- **Total Built up Area:**

  Plot 'A' = 49518.00 sq m.(TYPE-II, TY-III,TY-IV)

  Plot 'B' = 13085.74 sq m.(TYPE- V and TY-V I)

Design Philosophy:- On plot A site Type – II, III, and IV quarters have been proposed with community facilities Shopping, Nursery School, Dispensary and community center etc. On plot B site Type – V, and VI quarters have been proposed with Guest House. Each type quarters designed in a different pocket of clusters surrounded by open spaces created for recreation and social interaction. Blocks are oriented in North – South direction for better orientation to have the sun in winters and avoid the same in summers.



Layout Plan - Plot 'A' (Ty-Ii, Ty-Iii,Ty-Iv)



Site View - Plot 'B' (Ty-V and Ty-Vi)

CENTRAL ACADEMY FOR POLICE TRAINING, BHOPAL



Administrative Block

- **Cost** : 210 crores
- **Area of Plot** : 397 Acres (Area of Campus)
- **Number of Floors** : Ground +1

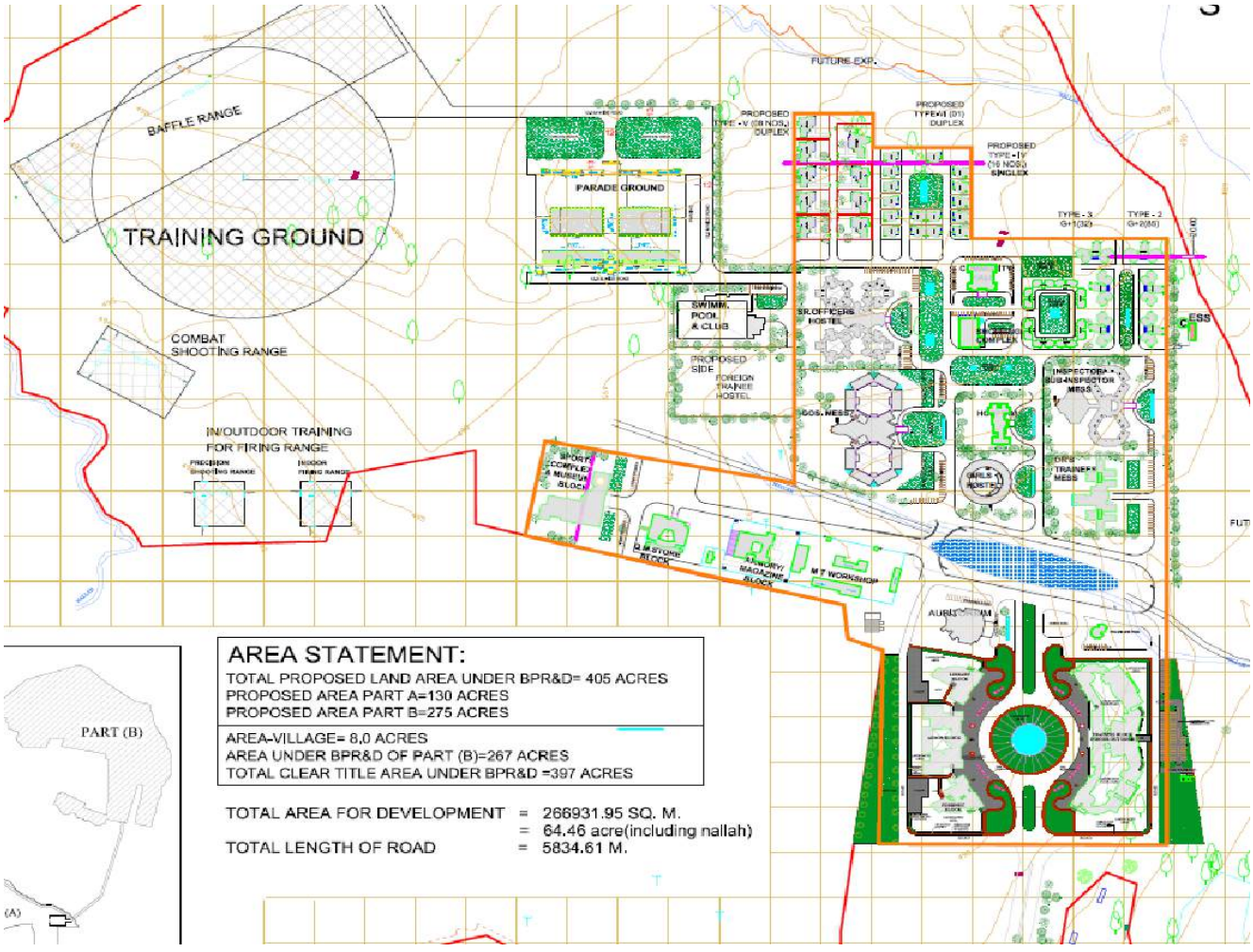
Design Philosophy:- It has incorporated integrated planning for maximum functional space utilization. Dome is Introduced to give sense of authority to the building. "State of Art" features has been used in this Building with the latest facilities. Courtyard type of planning is adopted with other sustainability based features including Rain water harvesting etc.



Academic Block



Forensic Lab



Campus Layout Plan

EXPERIMENTAL FACILITY FOR RODENTS FOR N.A.R.F FOR BIO-MEDICAL RESEARCH, HYDERABAD

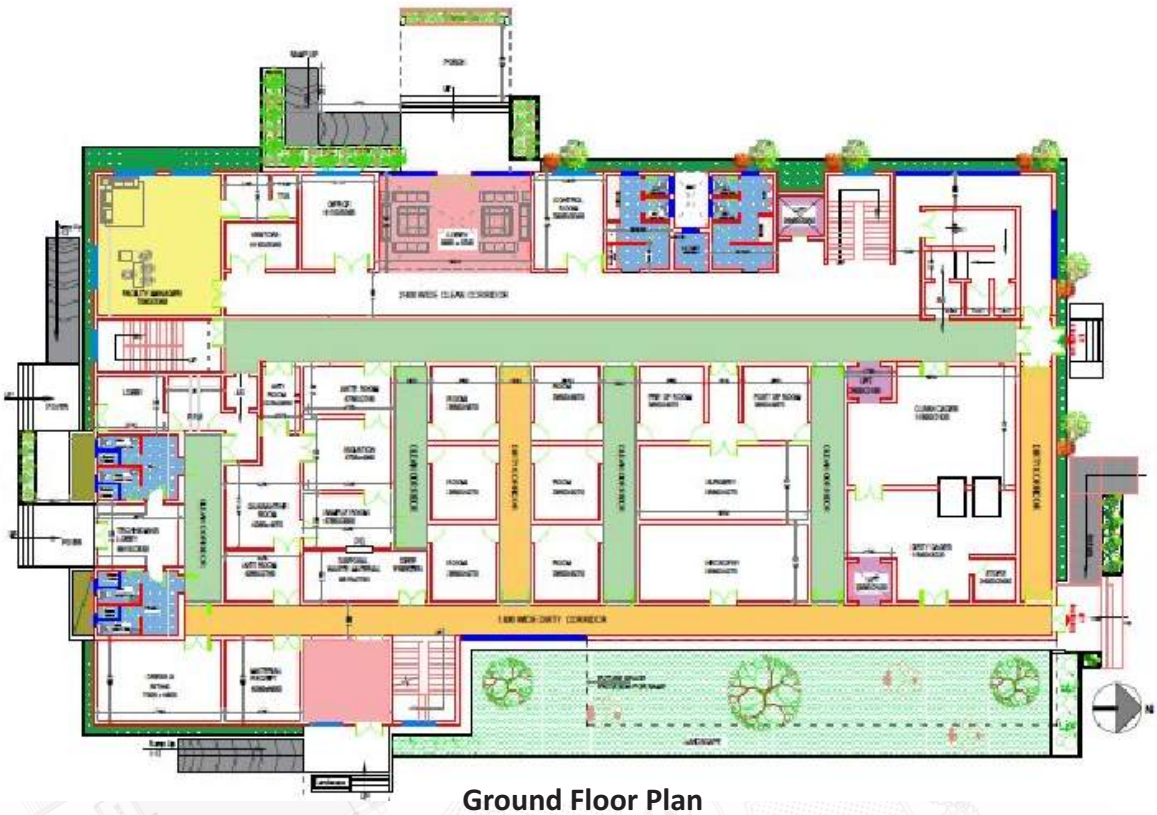


Front View of The Building



View of the Complex

- **Cost** : 210 Crores
- **Area of the Plot** : 102 Acres
- **Total covered built up area** : 38568 Sqm



Ground Floor Plan



First Floor Plan

OFFICE BUILDING FOR CBI AT HYDERABAD.



Perspective View

- **Cost** : Rs 20 Crores
- **Area of the plot** : 18,999.25 Sqm
- **Total Built up Area** : 4,085.72 Sqm
- **Number of Floors** : Ground +3 Floors.

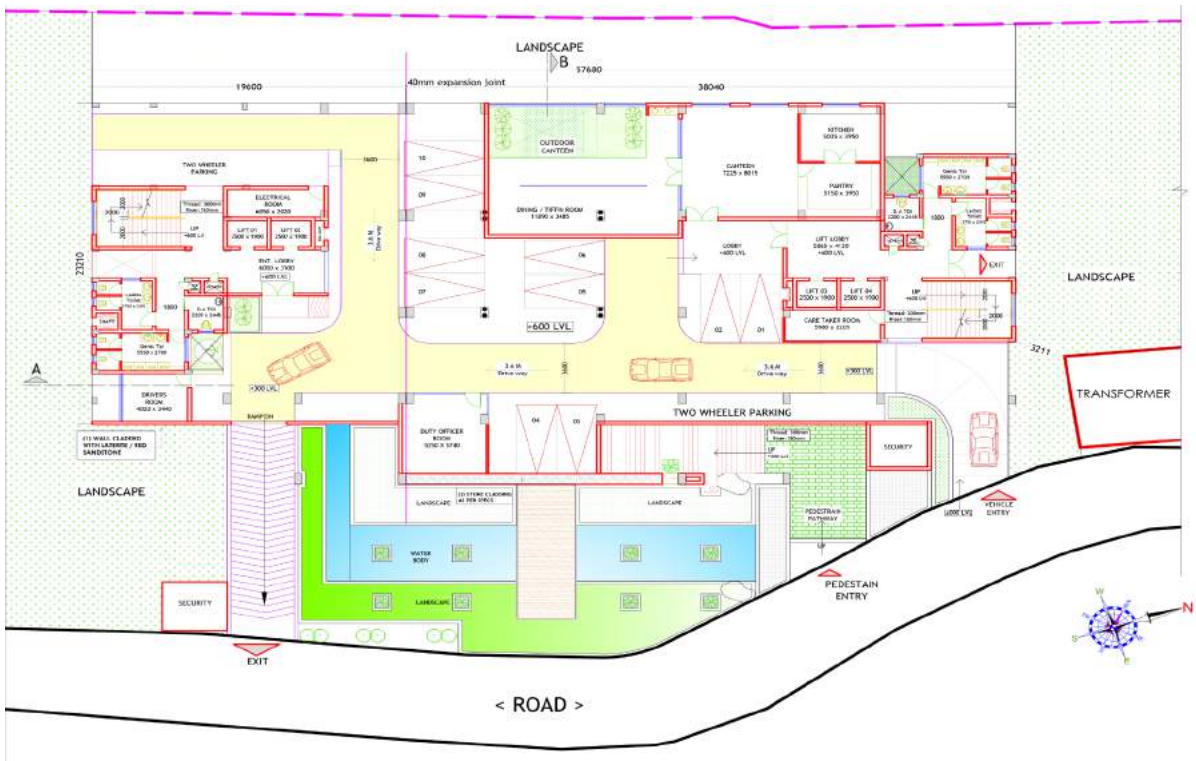
Design Philosophy :- Concept of blending the natural elements with building is adopted in the creation of Office Building for CBI, in order to provide refreshing environment to the occupants.

The Building has been designed as barrier free and in confirmation with green buildin3m, LED lighting and solar street lighting.

The building reflects its original character, aesthetically pleasing and houses the needs of client department within the frame work of norms and building bye laws.



Site Layout Plan



Ground Floor Plan

STUDENTS AMENITIES CENTRE FOR UNIVERSITY OF HYDERABAD

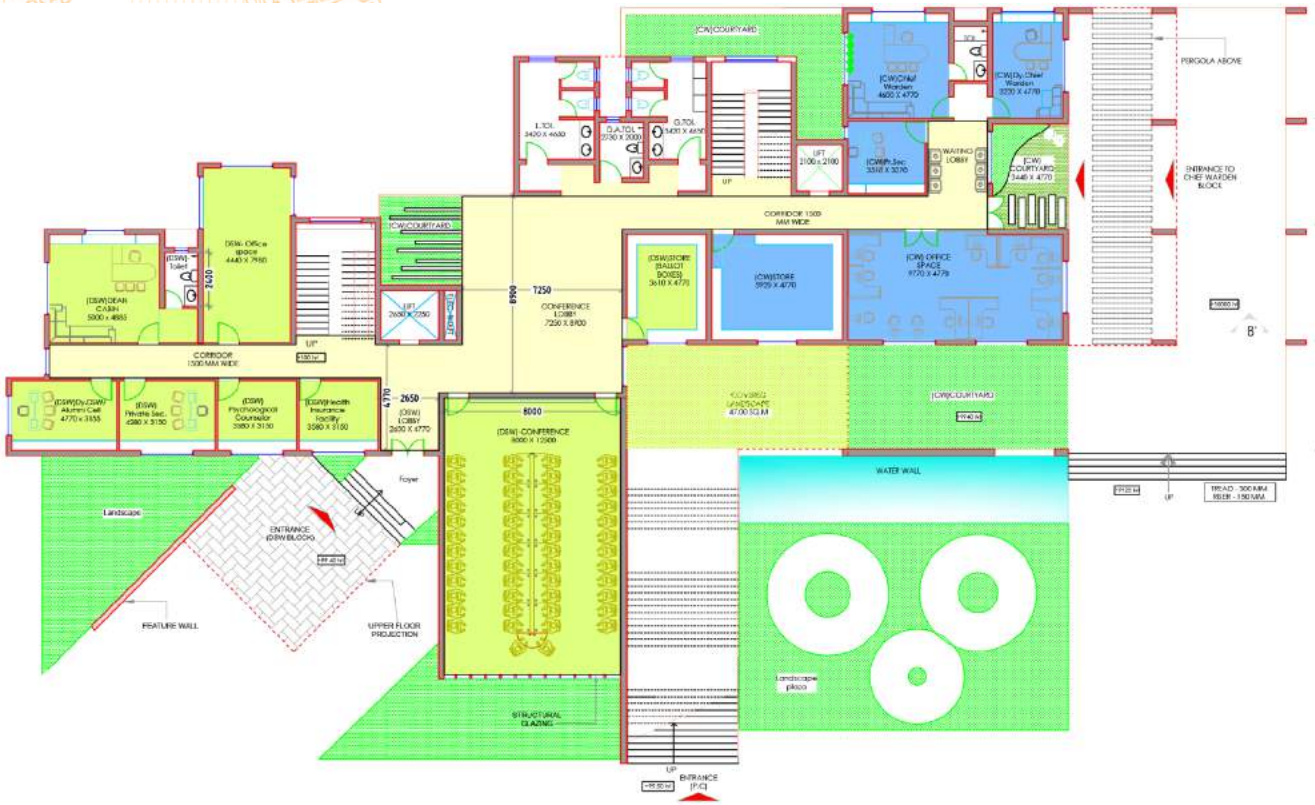


Perspective View

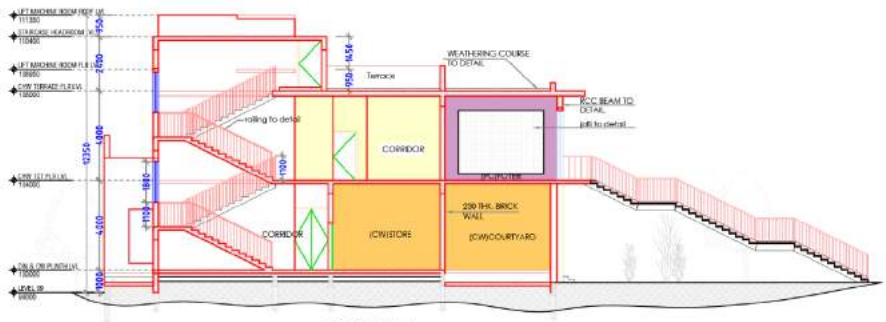
- **Cost** : Rs 12.25 Crores
- **Area of the plot** : 13594.6 Sqm
- **Total Built up Area** : 3196.07 Sqm
- **Number of Floors** : Ground + 1 Floors.

Design Philosophy:- Amenities Centre, has been conceived on Single Axis creating soft landscape pockets (which will act also as rain water harvesting resources) for coordinated interaction of student's community. The building reflects its original character, aesthetically pleasing and houses the needs of client department within the frame work of norms and building bye laws.

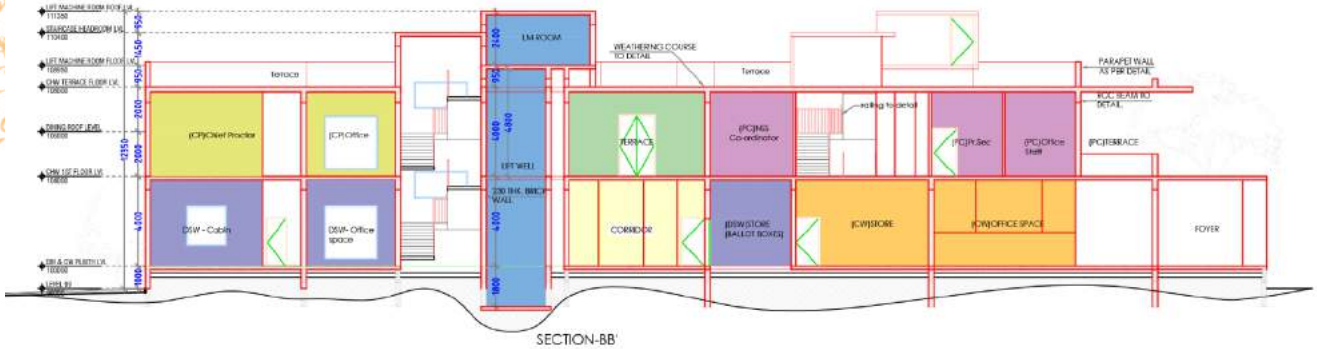
Open air theatre is annexed to the Main building with lift facility. Restaurant dining space located in such a way to cater both Main Block as well as open Air Theatre.



Ground Floor Plan



SECTION-AA'



SECTION-BB'

Sections

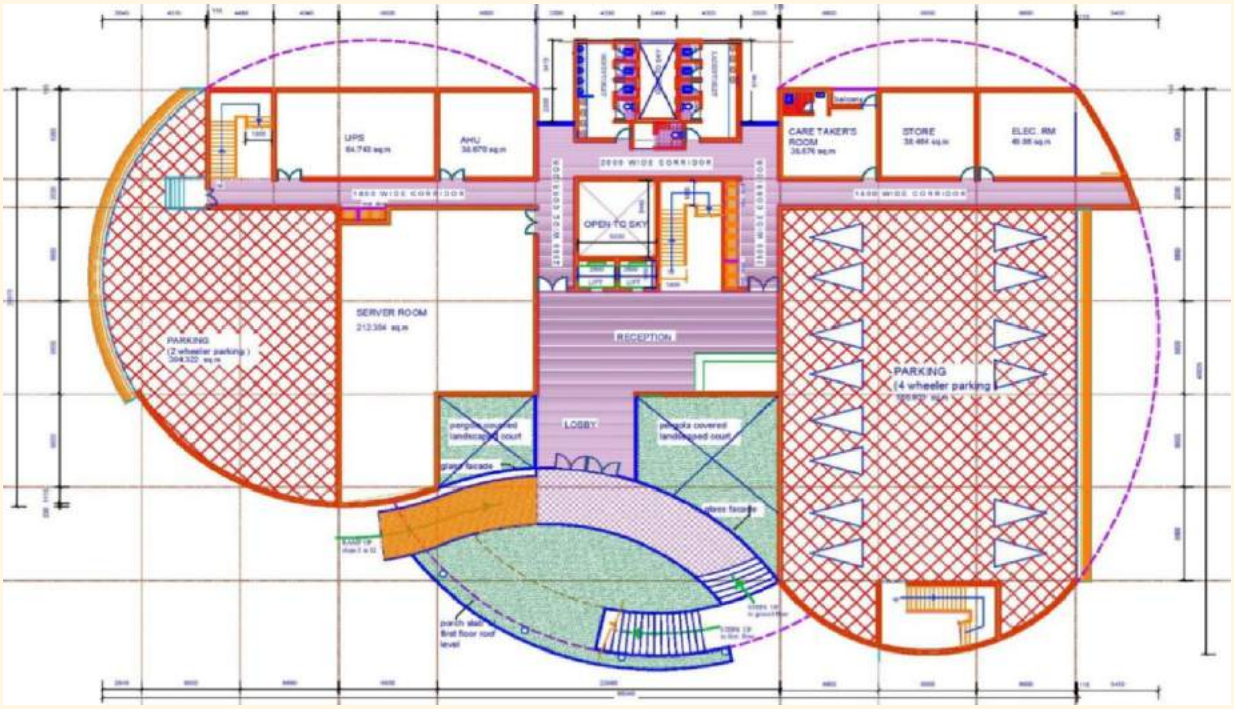
S.T.P.I-INCUBATION CENTRE AT TIRUNELVELI



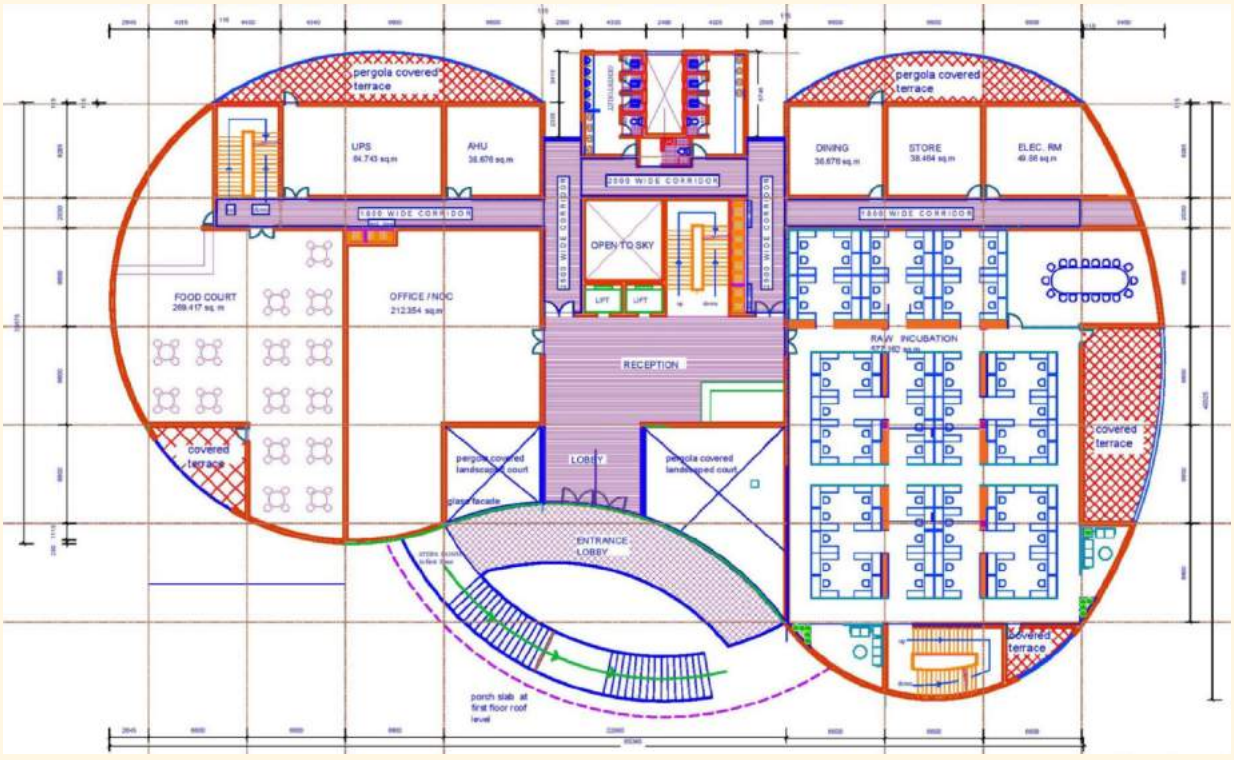
Perspective View

- **Cost** : 17.11 crores
- **Area of the Plot** : 3.07 Acres
- **Total built up area** : 2342Sqm
- **Number of Floors** : G+2

Design Philosophy:- This building is designed innovatively incorporating curve forms on the façade to project an iconic building. The internal layout is carefully planned and designed so as to provide utmost conducive work environment. As it is a fully air conditioned building, services for the same have been taken care. The building is designed as per GRIHA guidelines.



Ground Floor Plan



First Floor Plan

HOLIDAY HOME AT RAMESHWARAM



- **Cost** : 22.67 Crores
- **Area of the Plot** : 1 Acre
- **Plinth Area** : 5183 Sqm
- **Number of Floors** : G+3

Design Philosophy:- Perceived and designed as a stand-alone building. The building has been efficiently planned to provide utmost privacy and luxury with spacious rooms and balconies. Green building parameter has been adopted.



Perspective View



Site Plan/ Ground Floor Plan



First Floor Plan

TRANSIT COMPLEX FOR INDIAN INSTITUTE OF TECHNOLOGY, PALLAKAD.



Site Layout

- **Cost** : Rs 86 crores
- **Area of the plot** : 28 Acres
- **Number of Floors** : Ground +2/3 Floors.

IIT-Palakkad, newly formed IIT, is currently functioning at Ahalya educational campus at Kozhipura, Palakkad . The site is composed of Rocks with steep contours with combination of plane areas at western corner of middle portion of the site.



Perspective View



Perspective View

Design Philosophy:- The main road is planned along the boundary at north-eastern side of the front linear portion. Academic complex/conventional center is placed in the front and designed along with slope in different levels. Multipurpose hall/Auditorium Block is designed with car parking onto the side of academic block so as to have segregated public circulation.

Mess is placed at the pivotal point so as to have equal distance of access from academic block as well as residential buildings/Hostel Blocks. Girls hostel is kept slightly on high land and is adequately green-buffered. Boys hostels are clubbed together and are placed on the way to play ground. A service road with separate entry is provided at the lower contour area which runs till the rear play ground.

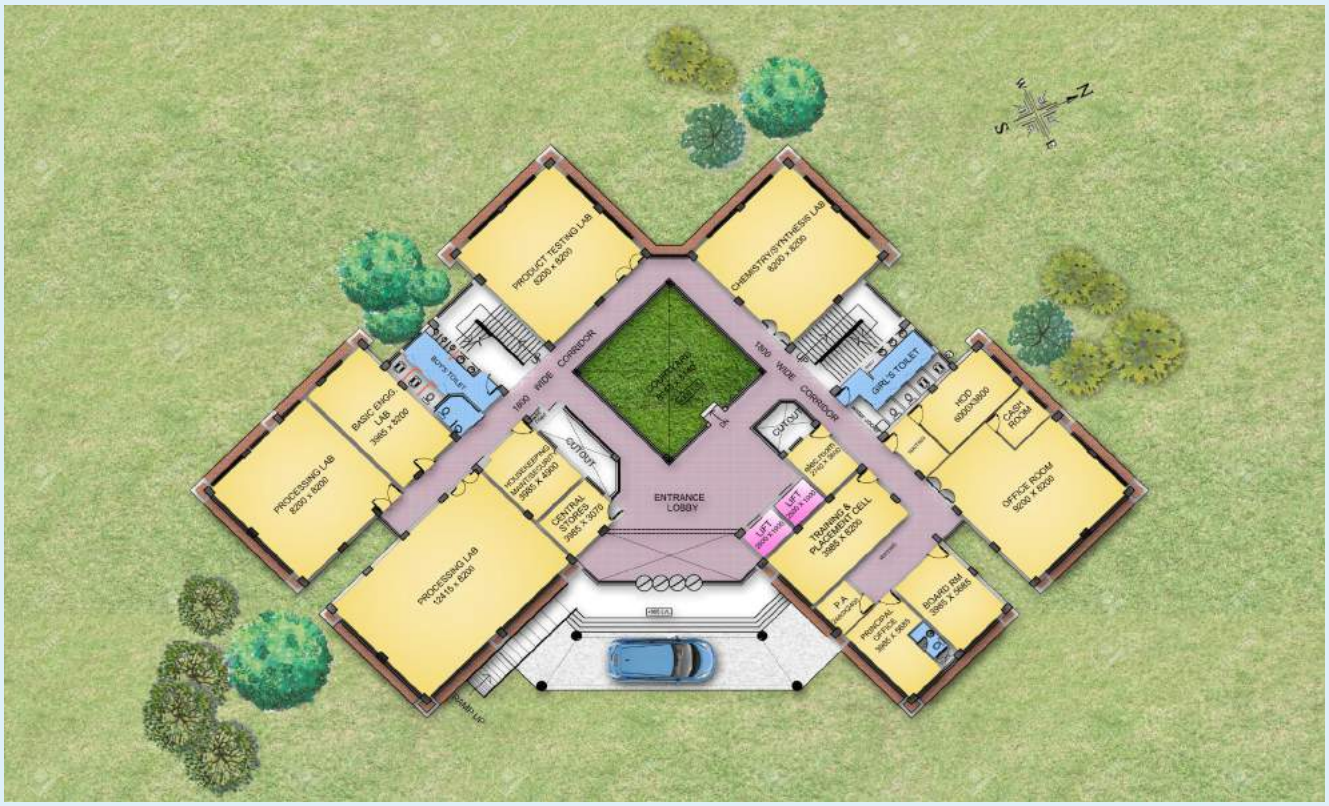
CENTRE FOR BIO-POLYMER SCIENCE AND TECHNOLOGY, COCHIN



Administrative block

- **Cost** : 16.8 Crore
- **Area of Plot** : 3 Acres
- **Total Built up Area** : 2555.4 Sqm
- **Number of floors** : Ground +2

Design Philosophy:- Design of the building focussed on the functional efficiency of the internal layout. Double Glazed structural glazing system for the front façade, central courtyard has been provided for maximum Natural light and ventilation. Green building norms, Barrier free provisions have been adopted in the design.



Ground Floor Plan



First Floor Plan

GENERAL POOL RESIDENTIAL ACCOMMODATION (GPRA) -PLINTH AREA NORMS

Ministry of Housing and Urban affairs is the Nodal Ministry for providing houses under General Pool Residential Accommodation (GPRA) to be constructed for Central Govt. Employees all over India. GPRA norms and designs are prepared by CPWD Architects in consultation with MoHUA.
As per the MoUD OM. dated 25/08/1987, area of type quarter for type I (A) to type VI (E1) in sqm were as under:

Type	Area of Unit (Sq.Mt)	Staircase (Sq.Mt)	Balcony (Sq.Mt)	Parking(Cycle,scooter shed/garage) (Sq.Mt)
I	34	5	7.45	2.5
II	45	5	7.45	2.5
III	55.75	5	7.45	4.2
IV	83.6	5.5	7.8	4.2
V	139.35 +18.6 (servant)	6+4.5	9.85	20.9
VI	198+25 (servant)	6+4.5	11+5(servant)	20.9

Vide OM dated 18/04/2006; Plinth area norms for Type VII and VIII were fixed as under:

Type	Area of Unit (Sq.Mt)	Staircase (Sq.Mt)	Balcony (Sq.Mt)	Parking(Car garage) (Sq.Mt)
VII Bungalow	316 +80 (Staff Qtr)	12+13.5 (Staff Qtr)	22+15 (Staff Qtr)	41.80 (2 No.)
VIII Bungalow	418 +120 (Staff Qtr)	12+27 (Staff Qtr)	22+30 (Staff Qtr)	83.90 (4 No.)

Vide OM dated 11/12/2008, A special category Type IV special was created due to area being more than Type IV with following norms:

Type	Area of Unit (Sq.Mt)	Staircase (Sq.Mt)	Balcony (Sq.Mt)	Parking(Car garage) (Sq.Mt)
IV (Special)	111.48	6	8.52	1 car

Vide OM dated 16/09/2009 and 23/05/2012, Parking norms were relaxed as under:

Type I- 0.5 ECS/unit, Type II- 1 ECS/unit, Type III- 1.25 ECS/unit, Type IV & IV (Spl.)- 2 ECS/unit, Type V- 2 ECS/unit, Type VI- 3 ECS/unit, Type VII- 3 ECS/unit, Type VIII- 4 ECS/unit

Vide OM dated 22/03/2010, Percentage variation of 5% in plinth area was allowed for architectural planning / treatment in Type I to V against existing provision of 2% for Type I to III only. Further with changes in lifestyle, modern gadgets, mode of travel and scarcity of land need was felt to revise these norms. Vide OM dated 07/08/2013; the revised plinth area norms are as under:

Type	Area of Unit (Sq.Mt)	Staircase (Sq.Mt)	Balcony (Sq.Mt)	Utility Area/balcony (Sq.Mt)
I	40.8	7	6.5	2.5
II	54	7	6.5	2.5
III	63	7	6.5	3.5
IV	86 +17 (Servant Room)	7	12+2.5	3.5
IV (Special)	106 +17 (Servant Room)	7	12+2.5	3.5
V	145+21.5 (Servant Qtr.)	7+7	12+3.5	4.5
VI	203.5+21.5 (Servant Qtr.)	7+7	21.5+3.5	4.5
VII	287+21.5x2 (Servant Qtr.)	7+7	35+4	9
VIII	403+21.5x4 (Servant Qtr.)	7+3.5	45+4	12

Parking norms are as under:

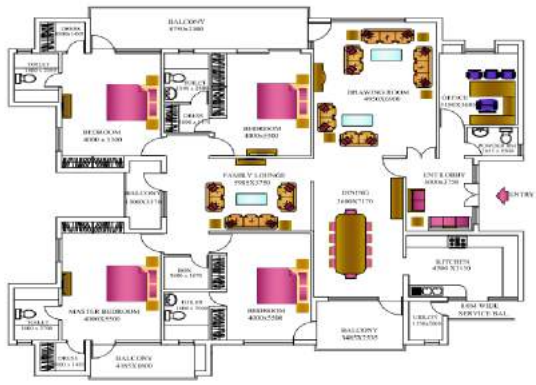
Type I- 0.5 ECS/unit, Type II- 1 ECS/unit, Type III- 1.25 ECS/unit, Type IV & IV (Spl.)- 2 ECS/unit, Type V- 2 ECS/unit, Type VI- 3 ECS/unit, Type VII- 3 ECS/unit, Type VIII- 4 ECS/unit

Depictive planning to show the scale of amenities in each type quarter are as under:



Type 8

(4 Bedrooms, Drawing cum Dining Room, Family Lounge, Kitchen, Office with Toilet, 4 Toilets, Store, Balcony)



Type 7

(4 Bedrooms,1 Drawing cum Dining Room, 1 Family Lounge, 1 Kitchen, 1 Office with Toilet, 4 Toilet, 1 Store, Balcony)



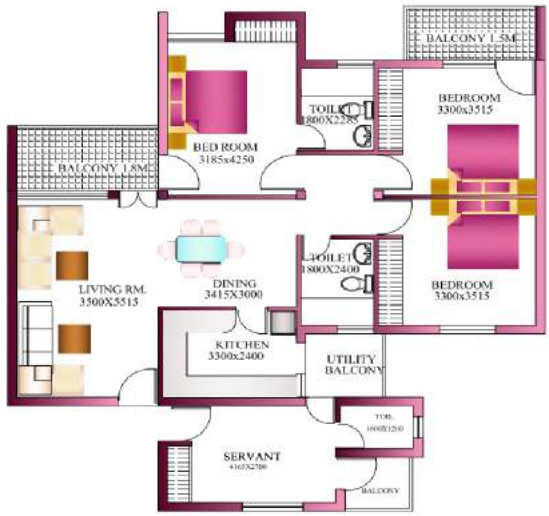
Type 6

(4 Bedrooms, Drawing Room, Dining Room, Kitchen, 4 Toilets, Store, Balcony, Servant Room)



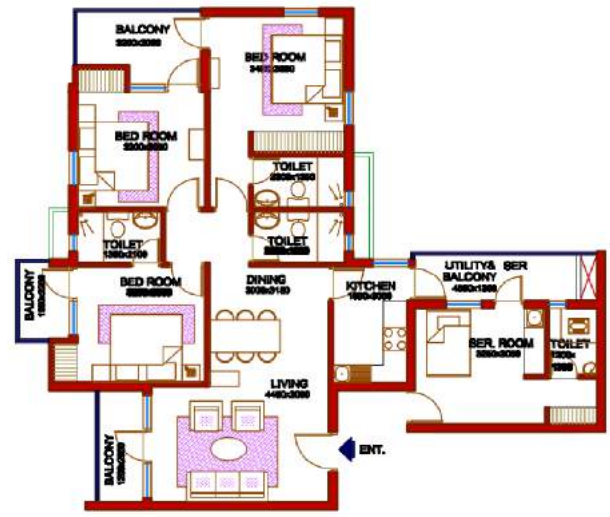
Type 5

(3 Bedrooms, Drawing/Living Room, Dining Room, Kitchen, 3 Toilets, Store, Balcony, Servant Room)



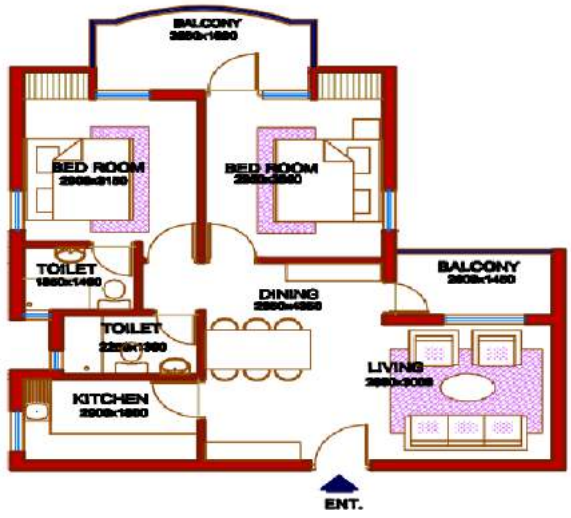
Type 4S

(3 Bedrooms, Drawing/Living Room, Dining Room, Kitchen, 2 Toilets, Balcony, Servant Room)



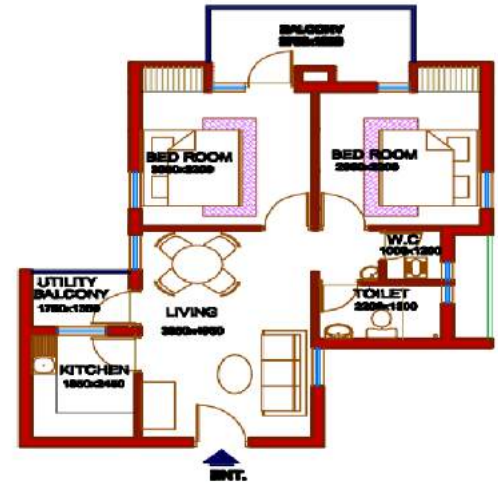
Type 4

(3 Bedrooms, Drawing/Living Room, Dining Room, Kitchen, 3 Toilets, Balcony, Servant Room)



Type 3

(2 Bedrooms, Drawing/Living Room, Dining Room, Kitchen, 2 Toilets, Balcony)



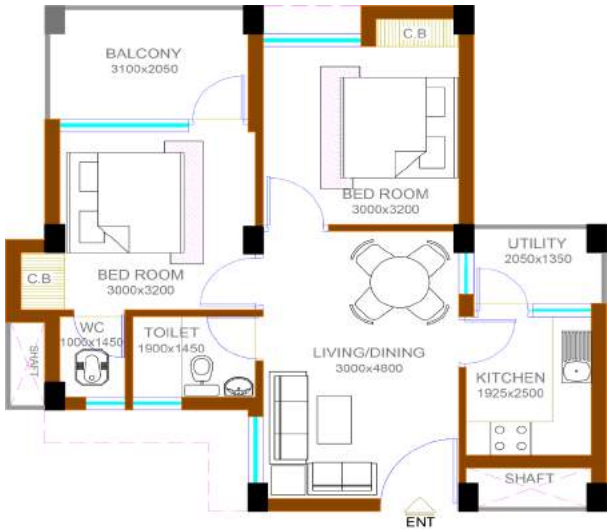
Type 2

(2 Bedrooms, Drawing cum Dining Room, Kitchen, 2 Toilets, Balcony)

STANDARDISED CRPF ACCOMMODATION

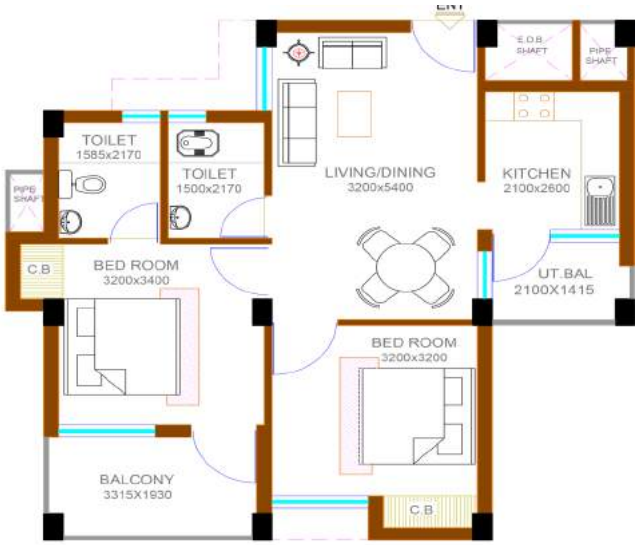
CPWD Architects have prepared typical design of type quarters for CRPF campuses to be followed all over India. These typical designs have been prepared as per latest GPRA Plinth Area norms and have been approved by the competent Authority of CRPF Directorate.

The Chief Architects and Senior Architects can modify the typical designs in CRPF projects in their respective jurisdictions based on the prevailing site and climate conditions and local building Bye Laws.



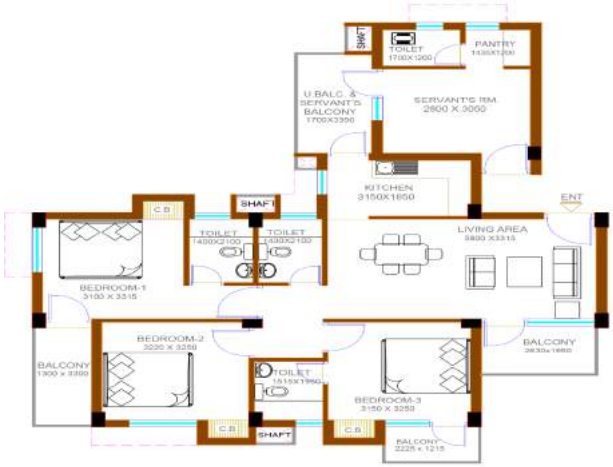
Type 2

Main Unit Area: 54 SqM



Type 3

Main Unit Area: 63 SqM



Type 4

Main Unit Area: 86 SqM

Servant Room:17 SqM



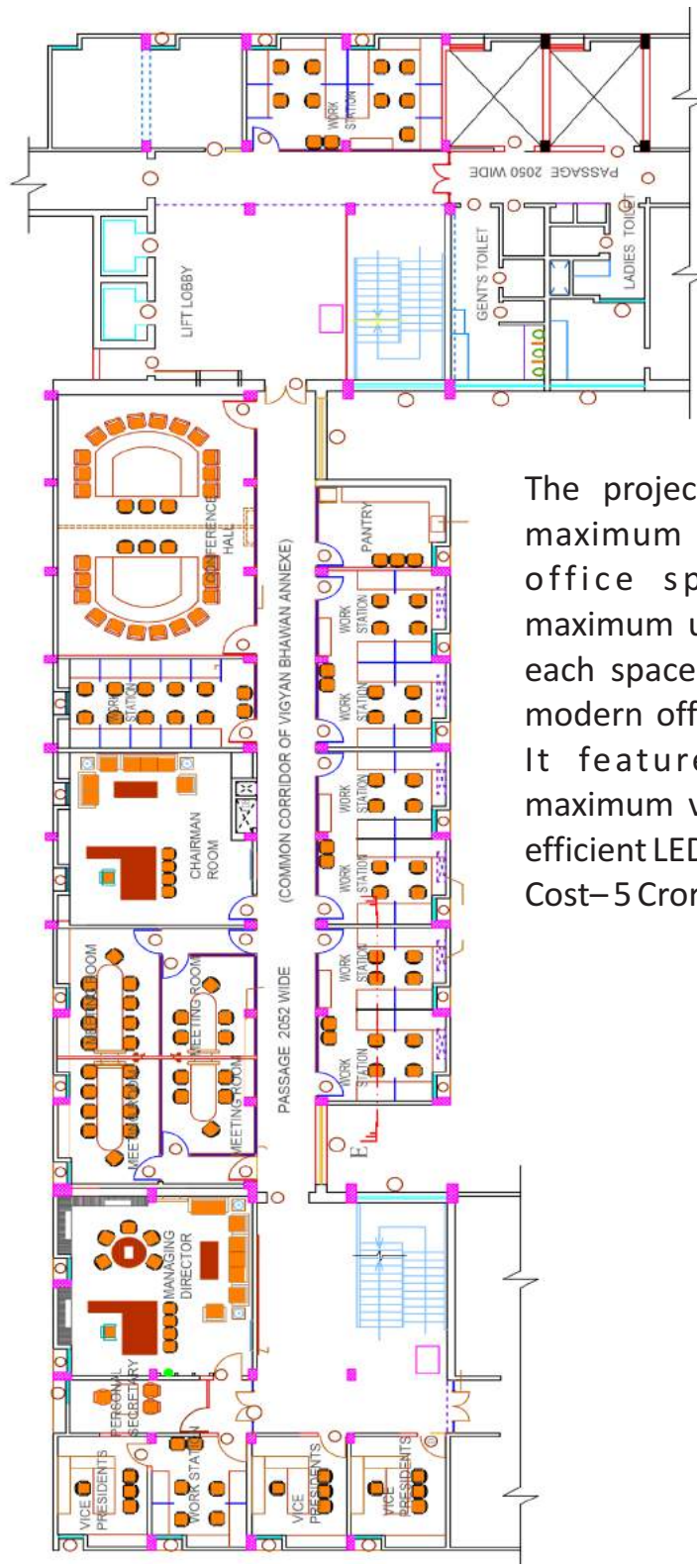
Type 5

Main Unit Area: 145 SqM

Servant Room:21.50 SqM

Interior And Landscape Design Projects

RENOVATION AND REMODELING OF ROOMS FOR INVEST INDIA AT VIGYAN BHAWAN, NEW DELHI



The project feature a maximum interactive office space with maximum utilization of each space on lines of modern office systems. It features use of maximum visibility and efficient LED lighting.
Cost– 5 Crore



Interior view of MD Room

Features– Modular furniture (in-house designed), LED lighting with false ceiling, Carpet tile flooring, Laminated Ply board based wall cladding, Full Height Interior Glass Partition



Interior view of Corridor



Interior view of Meeting room



Interior view of Conference room

INTERIORS / REFURBISHING FOR THE OFFICE OF CGA AT E-BLOCK (G+4) AT GPOA, INA, NEW DELHI



View of Reception

Design Philosophy:- The building is designed to house the office of Controller General of Accounts. During the course of designing the client had laid out following requirements-

- Segregation of spaces for Senior Officers from public offices
- Well designated spaces for varied office activities.
- Maximum space utilization
- Modern design while retaining the essence of public building
- Best utilization of available elements/ materials at site

While designing the building, utmost care was given to ensure that all the above points are taken care of in the final outcome.

To this effect the placement of offices has been done in the order of hierarchy with the CGA occupying an office space on fourth floor to ACGA chambers being placed on ground floor. Such provision avoid any heavy footfall/ lack of privacy for the Senior officials.

All the offices spaces have been such designed so that there is minimum generation of negative spaces with adequate space given to each office activity/ officer as per the dictated norms.



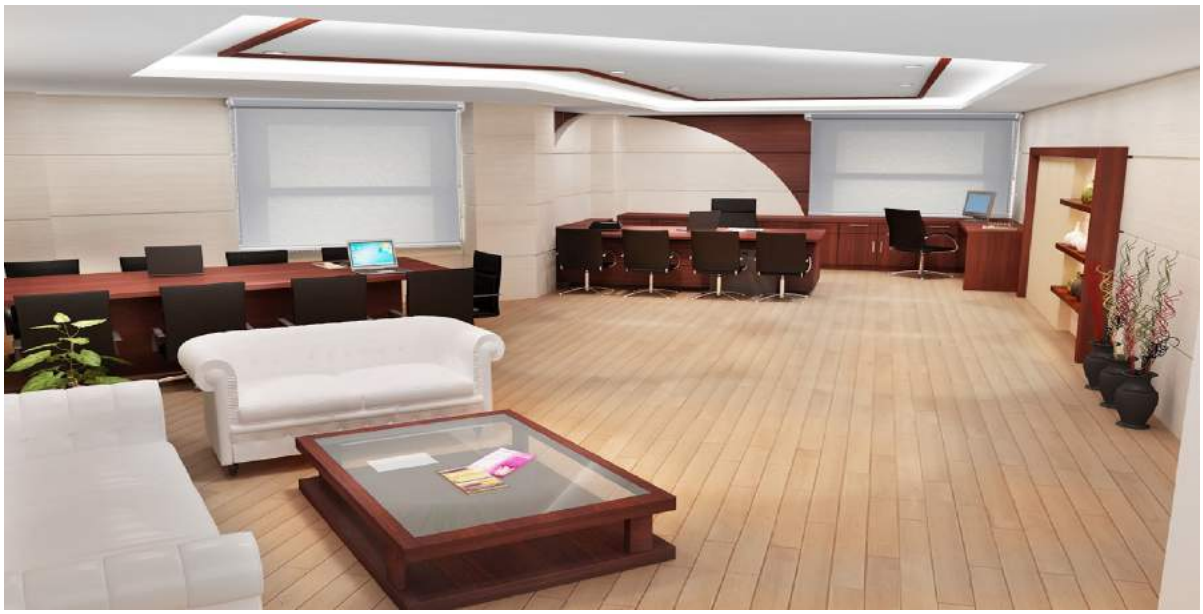
CGA chamber

Showing dynamic approach towards design with the use of digital printing on glass partitions and mural works which not only carry certain messages but also make them eye catching.



Part of Reception lobby displaying sculpture

Space showing sculpture of Yaksh-Yakshni and Kuber Yantra over glass has been created in Entrance Lobby/ Reception Area to highlight the function of CGA office- care taker of finances for Government of India.



Additional CGA chamber

The form and furnishing selected for furniture are very contemporary in style and color with individual design for each type of space.



Additional CGA chamber

Wall treatment done in accordance with design details consists of Emulsion Paint, Texture Paint, High Pressure Laminate Panelling, Prelaminated Boards and Digitally Printed Glass walls.



Conference room

Harmonic relation between the flooring , and false ceiling and furniture with strategically designed lighting to enhance functional utilization of space



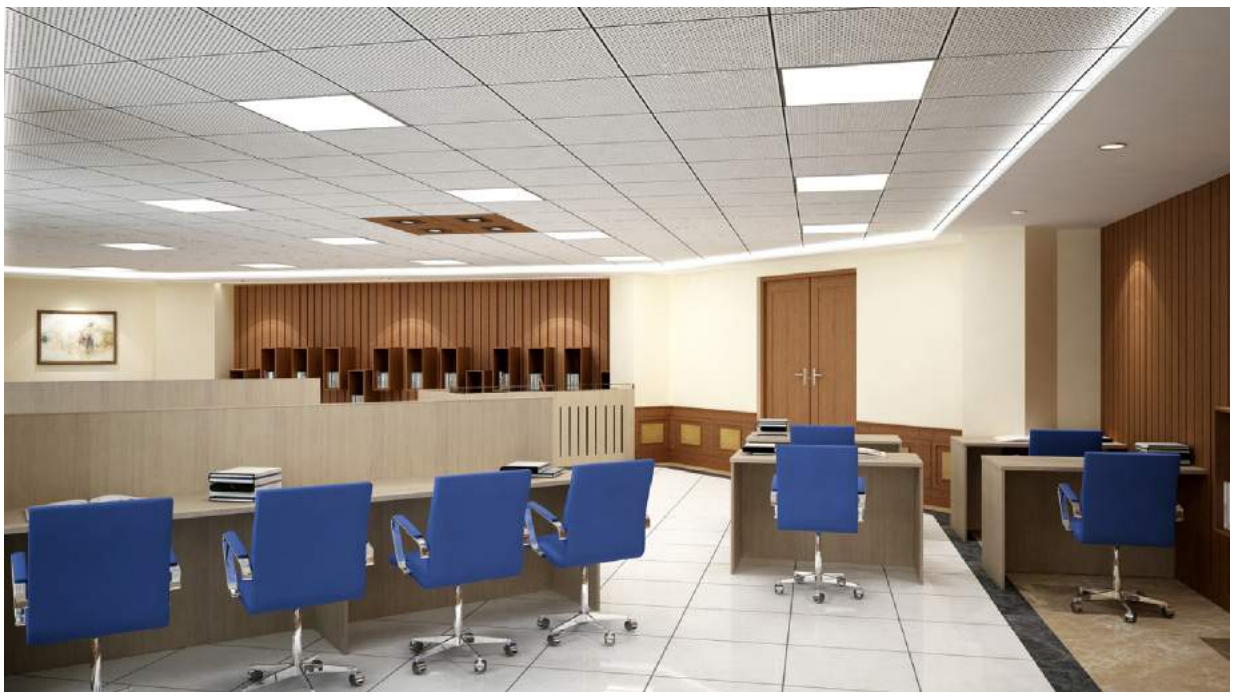
Canteen

Blend of contemporary and indigenous style and design forms with contrasting character has been used in recreational and informal spaces to create a feel of change



Meeting room

Light colored paneling has been used to improve lux level, to create a soft and sublime atmosphere and to reduce the maintenance aspects of internal areas.



Library

LED lights have been used in the False ceiling design to reduce energy consumption.

LANDSCAPE OF PARKS ON DDU MARG, NEW DELHI



Park at pocket 3 A—Based on the geography of cosmos 'mandalas' where a series of terraces lead to the mandala. The park has facilities for walking jogging, meditation, yoga, and play area beside essential public services.

Area of Park at pocket 6 B, 2.13 Acre









Park at pocket 6 B – based on Buddhist symbol of purity of body, speech and mind i.e. lotus.
Area of Park at pocket 3 A, 8.72 Acre



Park at pocket 7 A - based on the concept of rashis, where 12 triangles are positioned around the existing statue with each triangle representing 1 rashi and has plantation associated with it.
Area of Park at pocket 7 A, 6.55 Acre

STREET ART AT LODHI COLONY

India's first open air public art district came into being under the partnership of Central public Works Department and the Ministry of Home Affairs. The Lodhi Art District project aimed to work with the community and government bodies to use public art to enhance the visual identity and environment of the precinct, encourage maintenance of the neighborhood and build a sense of community pride.

The aim of this project is to use Art as a medium of change to spread the message of Swachh Bharat in a unique way. This will be a new approach to Swachh Bharat by transforming spaces into beautiful works of art with the direct involvement of the community.



An astronaut having achieved his destination is observing his environment-from the dense globe till its more pure elements



Portrayal of an intense cycle of life by depicting diverse and delicate kind of birds, one of the most characteristic element of capital



Art depicts the Indian national bird, Peacock, with its feather enclosing the Architecture of the building



Hands (characteristic style of the artist), merged with an intricate greenery, an important element of Lodi colony and its surrounding



A reflection on the concept of time and the power of creation, using A fusion of Warli and Mandala with contemporary Art .

Other Activities of Architectural wing



ADG (Arch) Mrs. Usha Batra received IBC medal 2014, medal 2015 and IBC medal 2016 for Best papers presented during mid-term and Annual convention and seminars .



ADG (Arch) Mrs. Usha Batra Chaired session on Building services- ICT in buildings during National workshop on National Building Code 2016 held at Vigyan bhawan on 20-21st Feb 2018



ADG (Arch) Mrs. Usha Batra Delivered expert talk on Contribution of Architectural Design in Green / Energy Efficient Building Concept at TKM college of Engg. Kerala on 9.1.2018



Ms. Debarati Chakraborty presenting paper in front of delegates of the World Water Forum held at Brasilia, Brazil during March 18th -23rd2018, in the Session 4.A.1 - Design For Water - Wise Cities



Yogendra Pal Singh Yadav



Mr. Yogendra Pal Singh Yadav, Deputy Architect has represented Badminton Team , Ministry of Housing and Urban Affairs as Captain in Inter-ministry Badminton Tournament 2017-18 held from 02nd to 12th January 2018 at New Delhi. Team Qualified up to Quarterfinal of Tournament.



Praveen Prabha Sharma

Ms. Praveen Prabha Sharma, Assistant (AD), has been setting standards for the women Employees of CPWD by actively participating in competitive Marathons/ Races regularly. Recently she was placed fifth in her age category in one of the 10k races. She has also contributed in supervision of painting Competitions for children, organized by CPWD, in Swachh Bharat Abhiyan on Gandhi Jayanti in 2017.



Vinod Kumar Sharma

Mr. Vinod Kumar Sharma, Assistant (AD), has been participating in competitive Marathons/Races regularly. He has some Full Marathons, Half Marathons and Quarter Marathons to his credit with personal best timings of 4 hours 15 minutes, 1 hours 58 minutes and 55 minutes respectively for the three categories. In one of the Quarter marathons, he was runner – up in his age category. He is the first person from the Architectural wing of CPWD to participate and make a mark in this newly trending sport. He is really an inspiration to the younger generation of CPWD employees for maintaining a healthy lifestyle.



Sachin Sharma

Mr. Sachin Sharma, Deputy Architect o/o CA(NDR), New Delhi has designed several posters for various departmental occasions like CPWD Day, Vigilance Awareness Week, Rashtrapati Bhawan Lighting Inauguration Function and Swacch Bharat event. He has designed Certificate of Service for retired officials and a common Departmental ID card.

He also judged painting competition conducted by Vigilance Unit of CPWD.







Vinay Kumar



Mr. Vinay Kumar, Deputy Architect, Dehradun has been actively participating in competitive Marathons/ Races regularly. Recently He participated in Dehradun Marathon 2017 ,organized by Uttrakhand Police Department and on the theme of " Women Safety" on 17 December 2017. He participated in 21 km (Male) category and was awarded with completion medal for finishing 21km in 2 hrs 40mins i.e. within 3 hrs time.

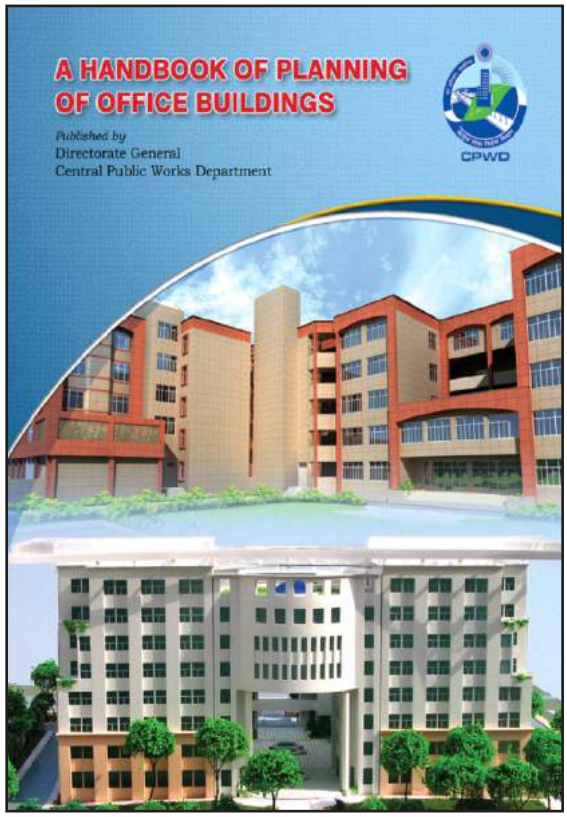


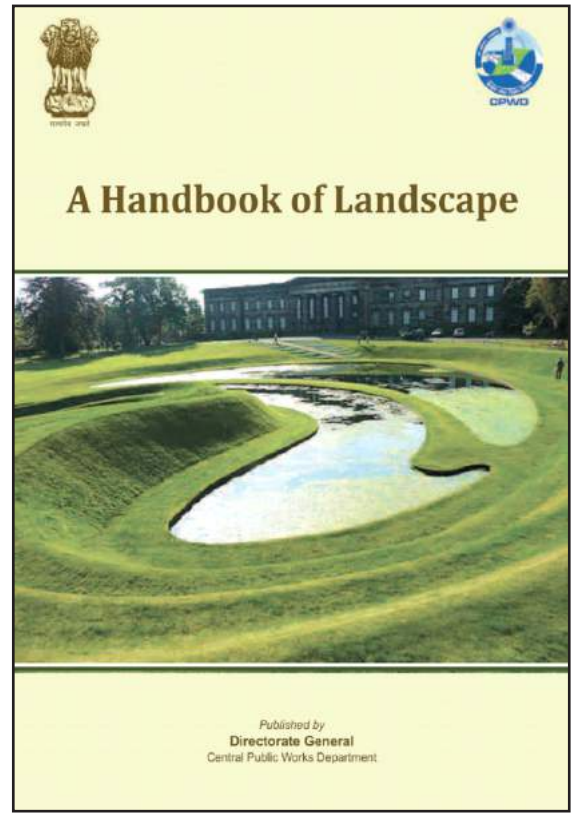
Debarati Chakraborty

Ms. Debarati Chakraborty, Deputy Architect, Kolkata has been involved in various research work in the field of Architecture and urban design.

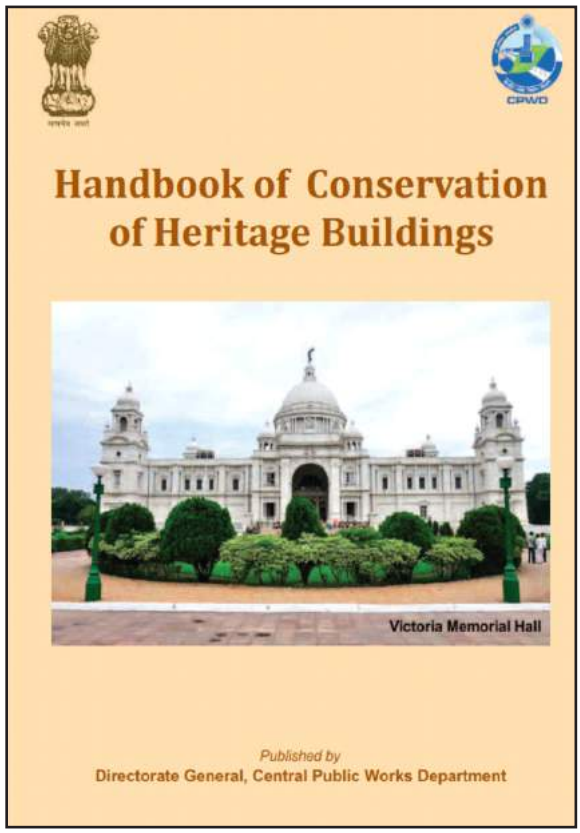
She recently presented a paper at the 8th World Water Forum held at Brasilia, Brazil during March 18th -23rd2018, in the Session 4.A.1 - Design For Water - Wise Cities.

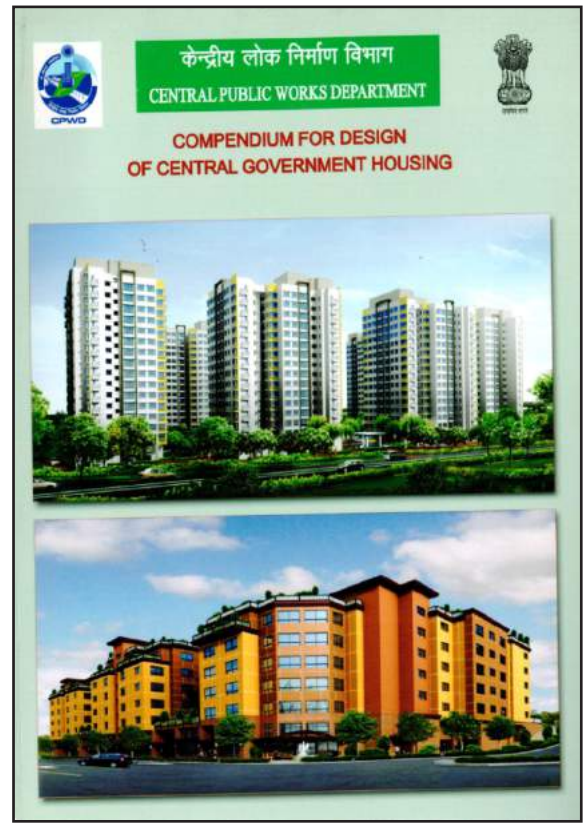
The Research Paper was on topic Urban Water for Sustainable Development. Which is also part of this edition of magazine.



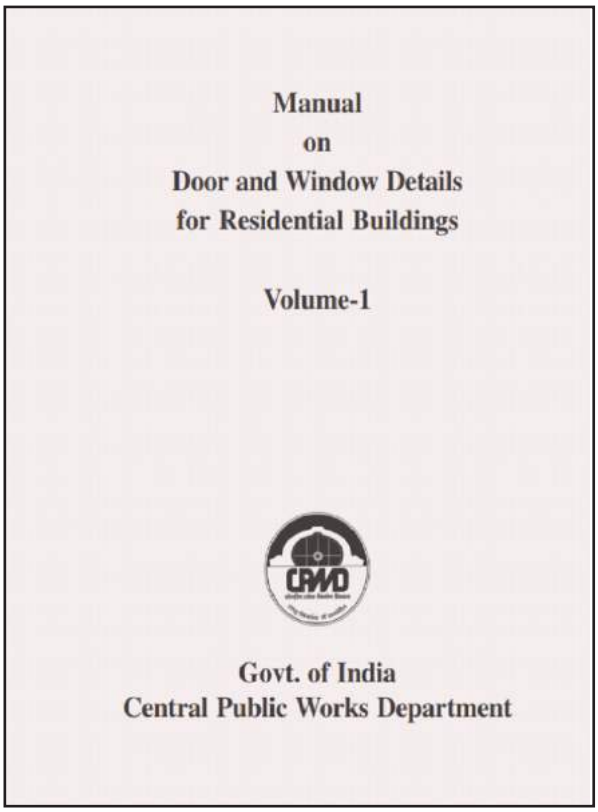


CONTRIBUTION OF ARCHITECTS IN PUBLICATIONS

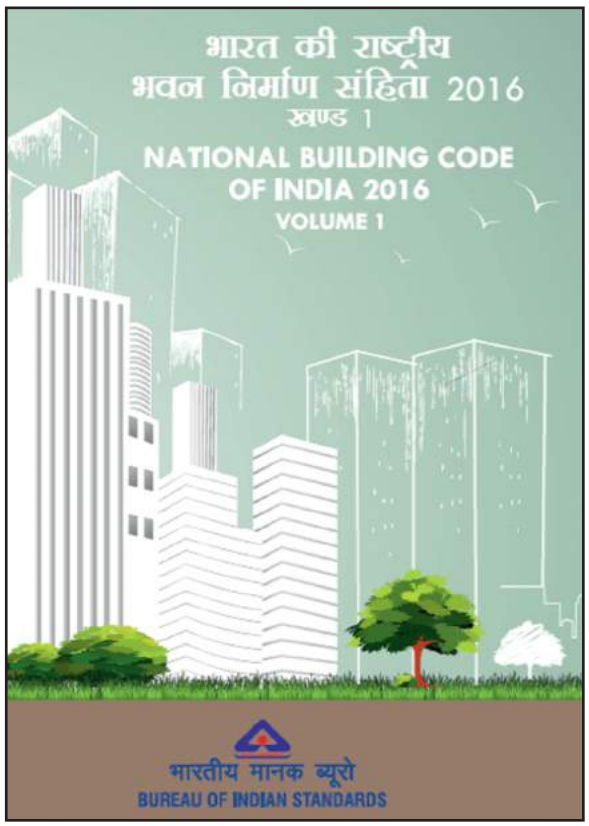


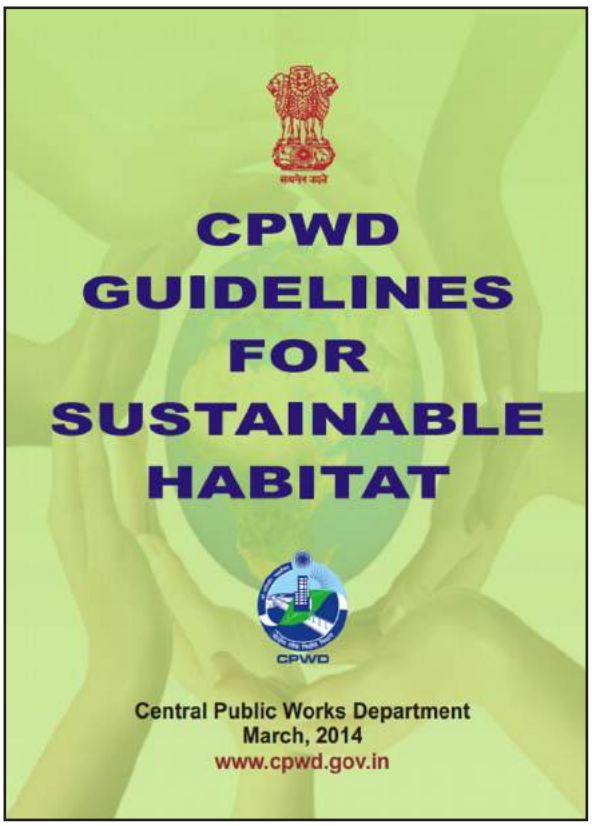






CONTRIBUTION OF ARCHITECTS IN PUBLICATIONS





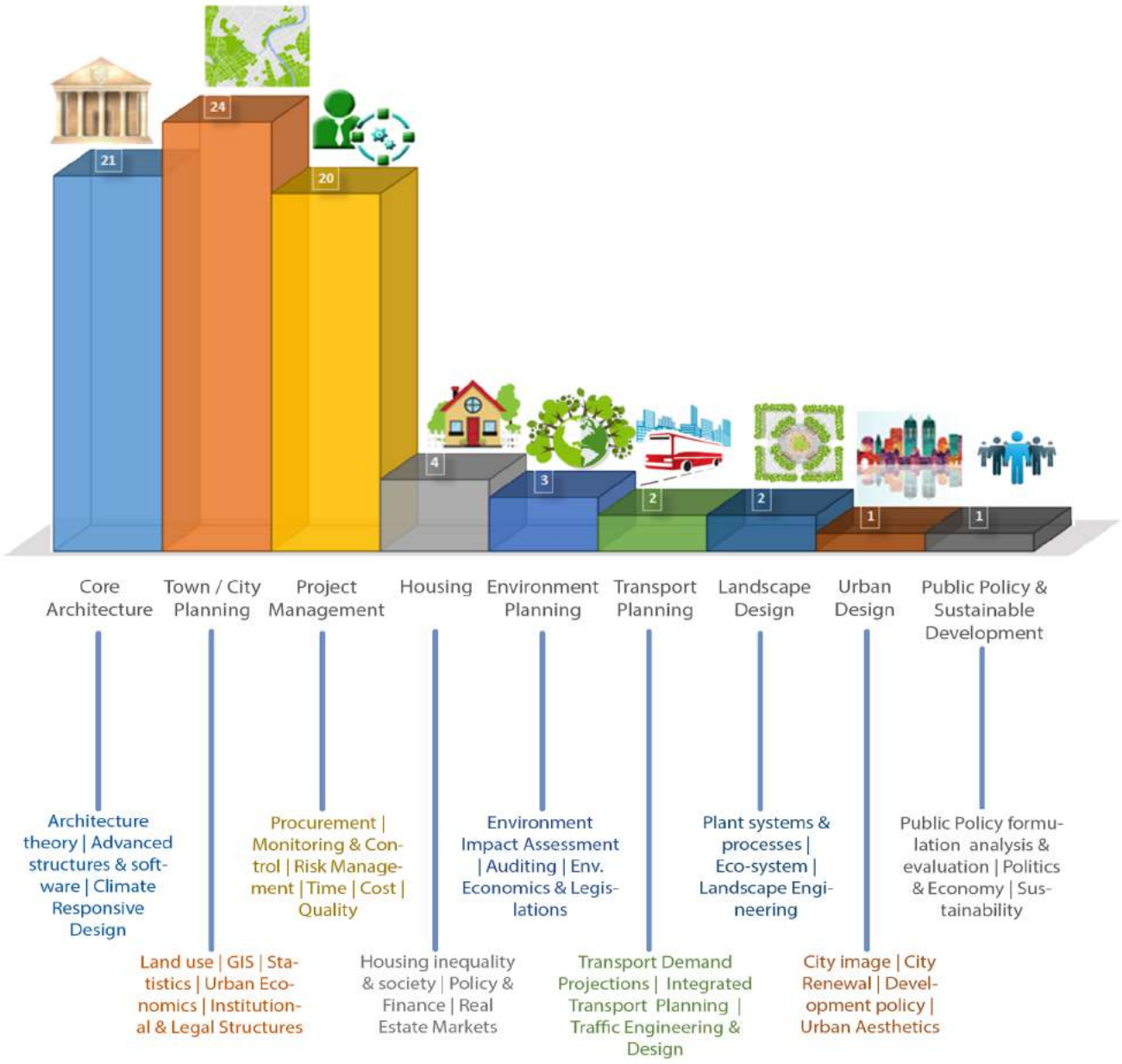
Specialized Human Resource in Architectural wing

SPECIALIZED HUMAN RESOURCE IN ARCHITECTURAL WING

In this era of globalization and specialization, it is important to have dedicated workforce that is specialized in varied fields of their profession for delivering state-of-the-art projects.

Architecture is a vast profession that comprises of specific fields such as Urban Design, Town planning, Landscape Architecture, Housing, Project Management etc. Presently, 78 officers of the Central Architects Cadre, CPWD are specialized in various fields of Architecture. They have completed their specializations from reputed institutes like School of Planning and Architecture - Delhi, IITs, NITs etc. This has greatly improvised the quality of work produced by the Architecture-wing of CPWD.

The number of officers, in the Central Architects Cadre, who have successfully completed their specialization in the specific fields are shown in the graphic. The details of these officers and their specializations are elaborated subsequently.



PROJECT MANAGEMENT


T S Vivekananda


Subrata Maitra


Ajay Keshav


K. Sudha


J S Gaikwad


Rajesh Singh


Dharmendra


Siva S


Tousheef Rashid


Deepali Mishra


Yogendra Pal Singh


Abhishek Chandra

"We shape our buildings; thereafter they shape us."
-Winston Churchill

M.TECH.


Tirunagari


Vinay Kumar


Aakriti Verma


Manish Gupta


Firoj Ahmed


Abhishek Kumar

"Logic will get you from A to B. Imagination will take you anywhere."
– Albert Einstein

URBAN AND REGIONAL PLANNERS


Ujjawal Kumar Pal


Biswajit Bose


Sulaiman Abdul


Arun Kumar Tyagi


Shaik Khader Basha


Arunima


Naveen Bhatnagar


Aveek Banerjee


Ashutosh Sahu


Sreenivas Gujjari


K. Chandrashekhar


Namita Nitesh


Chandan Khatua


Ashu Chaudhari


Vrushali Rajesh


Kirti Gupta


Sujaya Kashyap


Vivit Vedaraj N


Vishal Jaiswal


Gem George Jocab


Neeraj


Preeti Roy


Brujbhanu


Soumajyoti Das


Shahna Shamim

M. ARCH.


Indu G. Chaudhary


Bratati Ghosh


Abhishek Bose


Shibashish Ch


Dhurbadas Sen


Shailja U Sakharkar


Debarati


Charu Sengar


Purnendu P Pathak


Mohini A Rehpade


Mitali Saikia


Praveen Kumar


Akansha Agrawal


Sourodop Lahiri


Nancy


Ajesh Kapoor


Irfan Haider Khan


Kamal Passi


Gaurav Sarswat


Kumar Raushan

" As an architect you design for the present, with an awareness of the past, for a future which is essentially unknown."

– Norman Foster

TRANSPORTATION



Abhijeet Vardhan



Nikhil Soni

ENVIRONMENTAL PLANNING



Rajat Rashmi Goel



Arun Jeph



Swati Talwar

LANDSCAPE



Biswajit Roy



Renu Bhutani

HOUSING



Ruby Nee Kaushal



Goutam Patel



Ruchi Prasad

OTHER



Usha Batra
(MA-PPSD)



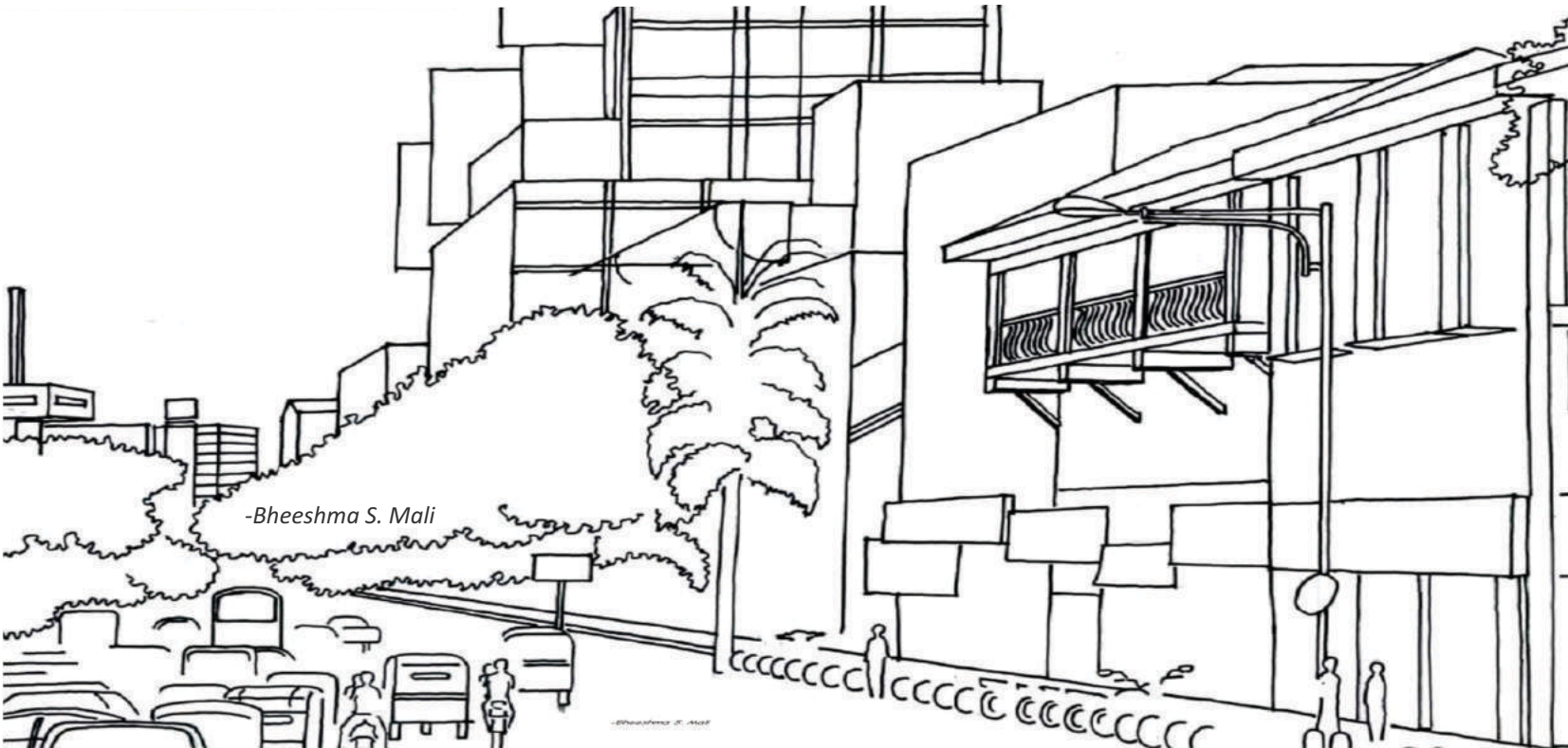
Sanjay Kumar Sahu
(PGPPM)



Pallavi Madaan
(MBA- Real Estate)



V. Vanumukil
(MBA)



Flag bearers of Architectural Wing

CPWD Training Institute, Ghaziabad

16 Week Foundation Training Programme for Dy. Architects of Batch 2015 by Chief Architect (Trg. Cum R&D) Unit

01 June to 18 September, 2015



Standing Ist. Row : Ar. Shailaja, Ar. Thenmozhi, Ar. Maheshwari, Ar. Pallavi, Ar. Nidhi, Ar. Neeti, Sangeeta Mathur (TO), Ar. Susheela, Shashi Bala Tiwari (CA-Trg), Rajesh Kumar(Ar-Trg), Ar. Valli, Ar. Charu, Ar. Vidhi, Ar. Priyanka, Ar. Kiruba, Ar. Mohini, Ar. Sujaya, Ar. Neetu.

Standing IInd Row : Ar. Abhilash, Ar. Chaitanya, Ar. Anurag, Ar. Gautam, Ar. Davis, Ar. Vishal, Ar. T. V. N. Siva Gopi, Ar. Dinesh, Ar. Dhanabalan, Ar. Siva S., Ar. P. P. Pathak, Ar.Dharmendra, Ar. Robin, Ar. Vivit, Ar. Pushpraj, Ar. Sachin, Ar. Sarvesh, Ar. Sridhar.

National CPWD Academy, Ghaziabad

Foundation Training Course for Dy. Architect and Special Training Course for Asstt. Architects - A Session on Planning of CAPF Works Held on 28-04-2017



Standing Ist Row : Mitali Saikai Dy. Arch, Kavita Chopra TO(Trg), Sunil Gosain Dy. Comdt. (Arch), Harish Chandra Ex. Comdt(Arch), Deepak Gupta ADG(Trg), U.K. Pal CA(Trg), Dhirendra Saini Insp(Arch), Sangeeta Mathur TO(Trg), G. Kiruba Dy. Arch, M. Sevega (Dy. Arch).

Standing IInd Row : Irafan Malik (Dy. Arch), Arun Jeph (Dy. Arch), Nazera Mohiddin (Dy. Arch), Aakanksha Agrawal (Dy. Arch), Deepali Mishra (Dy. Arch), Vivek Kumar Chenna (Asstt. Arch), Vikash Ranjan (Dy. Arch), Yogendra Pal Singh Yadav (Dy. Arch), Ruchi Prasad (Asstt. Arch), Veronica N.K.H. Mate (Asstt. Arch).

Standing IIIrd Row : Nikhil Soni (Asstt. Arch), Pranav Kr. Pandey (Dy. Arch), Nirosh Kumar (Asstt. Arch), Praveen Kumar (Dy. Arch), Ashok Kr. Maurya (Asstt. Arch). Vinay Kumar (Dy. Arch), Touseef Rashid Makroo (Dy. Arch), Jai Shankar Prasad Pandey (Dy. Arch),

Standing IVth Row : Bruj Bhanu Chandrawanshi (Asstt. Arch), Kamal Sindhu Patel (Dy. Arch), Soumajyoti Das (Asstt. Arch), Abhishek Kumar (Asstt. Arch), A. Singarvelan (Dy. Arch), Bheeshma Sanjay Mali (Dy. Arch), Gem George Jacob (Dy. Arch).

National CPWD Academy, Ghaziabad

Training on 8 Weeks Foundation Course for Asstt. Architects

05 March to 27 April, 2018



SITTING Row : Rajesh Kumar (Course Coordinator); D. Roy Choudhary (Faculty); Karam Vir Singh, ADG(Trg); Piyush Dave, CA(Trg.);
STANDING Ist. Row : Preeti Roy; Aiswarya M.; Nancy; V. Vanmukil; Aakriti Verma; Shahna Shamim; Ajesh Kumar Kapoor; Gowrisankar A.; Kumar Raushan; Manish Gupta.
STANDING IInd. Row : Monika Verma; Kavita Chopra; Swati Talwar; Sourodip Lahiri; Mohammad Tariq Umar; Atseituo Kechu; Gaurav Sarswat; Nishant Shankar Bhagat; Abhishek Chandra;
STANDING IIIrd. Row : Irfan Haider Khan; Neeraj Kumar; Kamal Passi; Deepak Kumar; Virat Singh.



Government of India
Ministry of Housing & Urban Affairs
Central Public Works Department