



ABOUT US











Team DDF comprises of:

Architects | Engineers | Quantity Surveyors | Surveyors | Healthcare Planners

Service Engineers | Urban Planners | Regional Planners | GIS Experts





VERTICALS



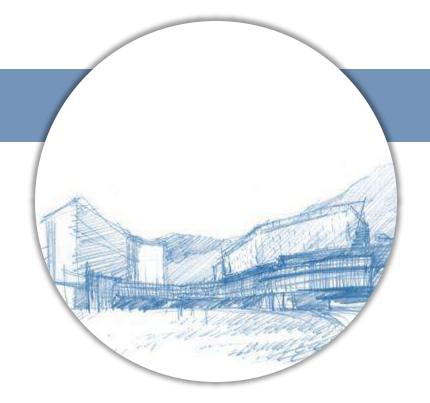


Planning

Regional Planning
Physical Planning
Environmental Planning
Project feasibility studies
Project evaluation studies

Healthcare

Project Conceptualisation
Infrastructure Planning
Service Planning
Equipment Planning
Hospital Operations





Architecture

Project Conceptualisation

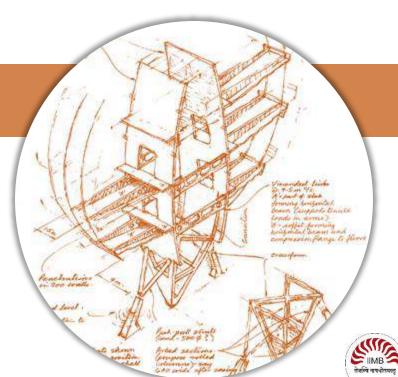
Building Architecture

Interior Architecture

Project Management

Engineering

Structural Engineering
Disaster Resistant Engineering
Geo-technical Engineering
Services Design



AUTHENTICATION AND AWARDS



This is to certify that

DDF CONSULTANTS PVT. LTD.

501, B - 9, I.T.L. TWIN TOWERS, NETAJI SUBHASH PLACE, PITAMPURA, DELHI - 110 034 (INDIA)

Has been found to conform to the Quality Management System Standard:

ISO 9001:2015

This certificate is valid for the following Product or Service ranges:

PROVIDING PLANNING, ARCHITECTURE AND **ENGINEERING SERVICES**

CERTIFICATE NO. : PCMS/QMS/B1019

. 18,706,7020 1 = Surveillance Due Oh; 18,067,2021

ATE 17,706/2023 2N° SURVEILLANCE DUE ON 18,05,72022

TY OF CERTIFICATE IS SUBJECT TO REQUIAR SURVEILLANCE AUDIT ON OR ABOVE MENTIONED DATES

THIS CERTIFICATE IS VALID WHEN CONFIRMED BY DATA LISTED IN THE INTERNATIONAL REGISTER OF QUALITY ASSESSED ORGANISATIONS COVEY/IRAD ORGANISATION COVEY/IRA

AGREEMENT MAY RENDER THIS CERTIFICATE INVALID. ANY ALTERATION, PORGERY OR FALBIFICATION OF CONTENT OR APPEARANCE OF THIS DOCUMENT IS UNLAWFUL AND OFFENDERS MAY BE PROSECUTED TO



P.C MANAGEMENT SYSTEM PVT. LTD





INSTITUTE OF URBAN TRANSPORT (INDIA)

in recognition of initiatives and exemplary efforts made by

DDF Consultants Pvt. Ltd., Delhi

Towards improvement in Urban Mobility in the City of Agartala through preparing Comprehensive Mobility Plan for the Agartala City and its Metropolitan area.

By way of following vision laid out in the CDP and CTTS of the City. It not only identifies the future growth pattern but also identifies alternative scenarios to evolve the strategy for improvement in the Mobility of the city, land use-transport integration, ITS application, parking policy. It identify projects related to public transport improvement, NMT, IPT, Feeder Network, Pedestrians and Management measure with proper phasing and financial implications based on felt need of the town and ground realities.

Confer this Special

Award for Excellence

on 5th December, 2008 in the Conference on Urban Mobility India 2008, New Delhi

Dr. M. Ramachandran Secretary, Govt. of India Ministry of Urban Development & President, IUT





Branch Offices:

Dehradun Mumbai Srinagar

Raipur Patna Agartala Kanpur Lucknow

Kolkata Bhilai Guwahati Hyderabad Ranchi Shimla

Leh, Ladakh Bhubaneswar Puducherry Jammu

Tripura

LOCATIONS

New Delhi (Head Office)

501, B-9, ITL Twin Towers, Netaji Subhash Place, Pitampura, New Delhi-110034

Phone: 011-47400500 (100 lines)

Fax: 011-47400555

Dubai (UAE)

Dubai Outlet mall, Dubailand Al-ain Road,, Dubai, UAE

Phone: +971 50 3642062

Queensland, Australia

Mode Design Corp Pty Ltd ABN 65 112 807 931 of 78 Annerley Road, Woolloongabba, Queensland 4102 Australia



KEY STATS





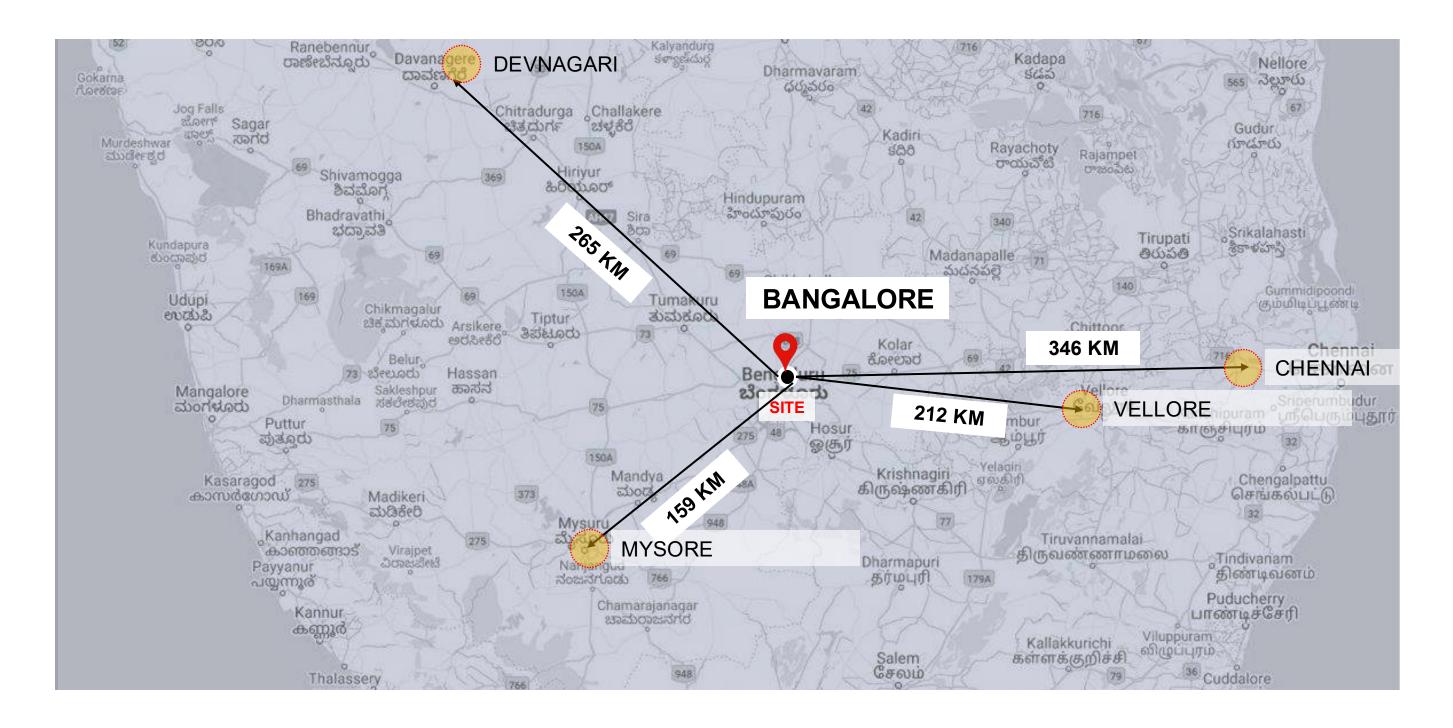




PROJECT OVERVIEW



CONNECTIVITY





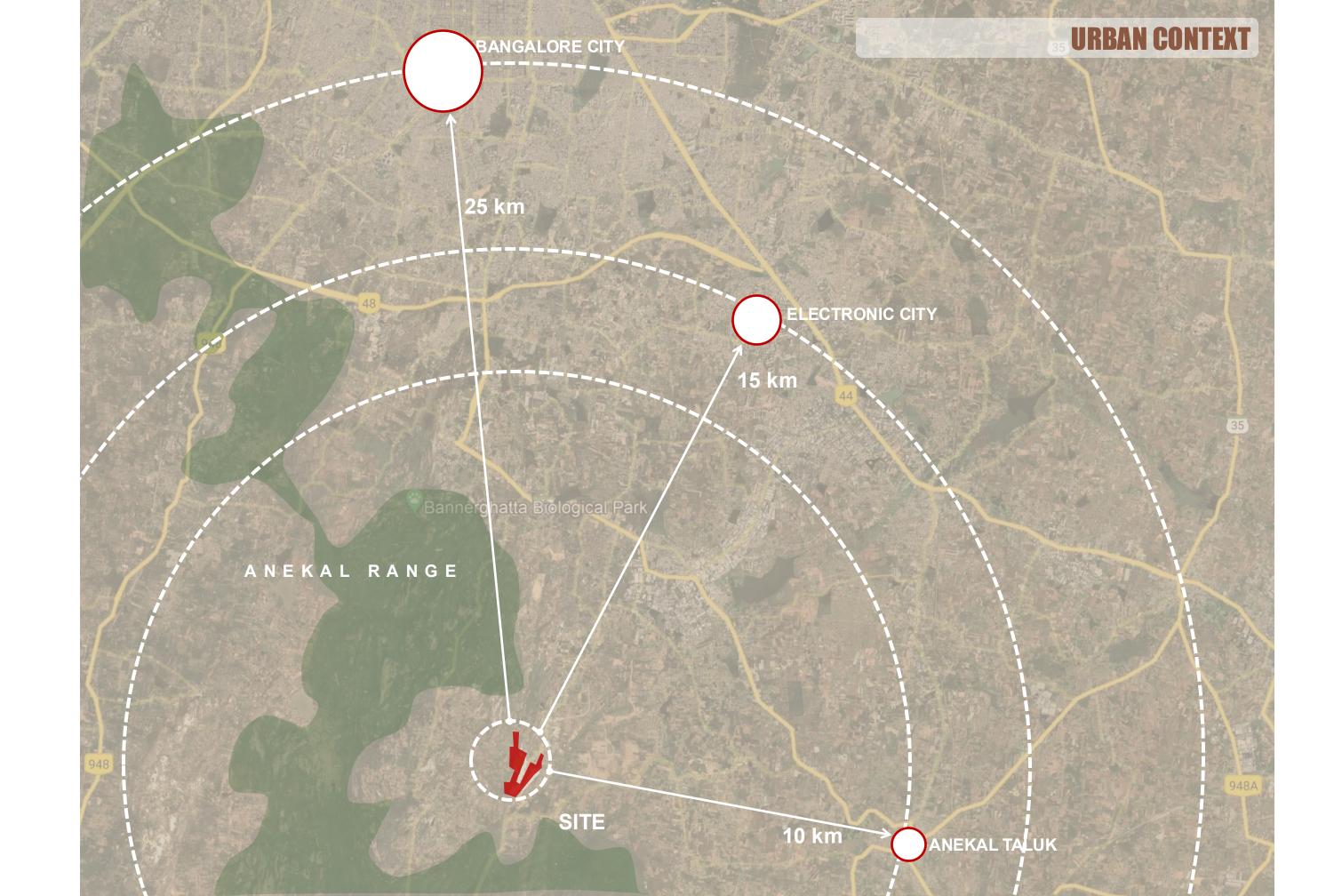


CONNECTIVITY

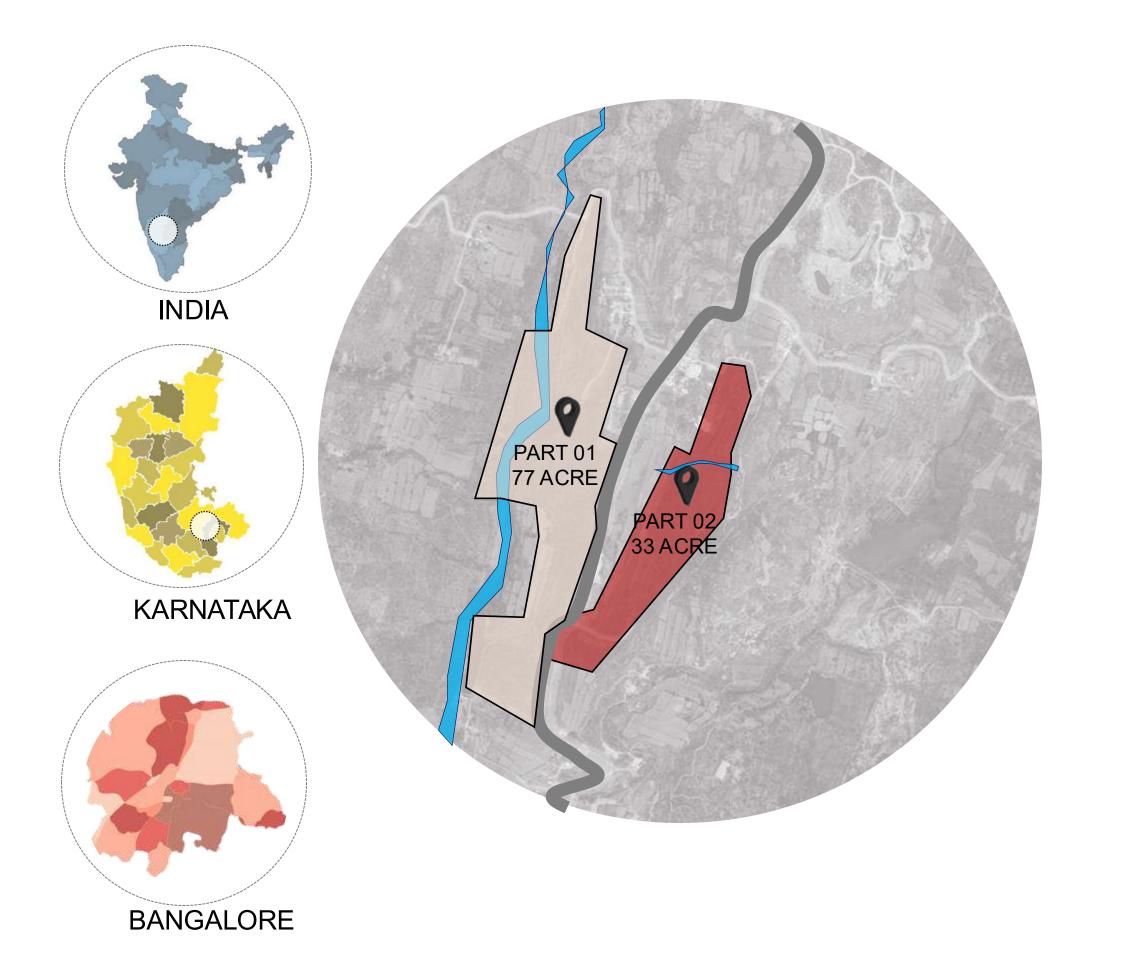








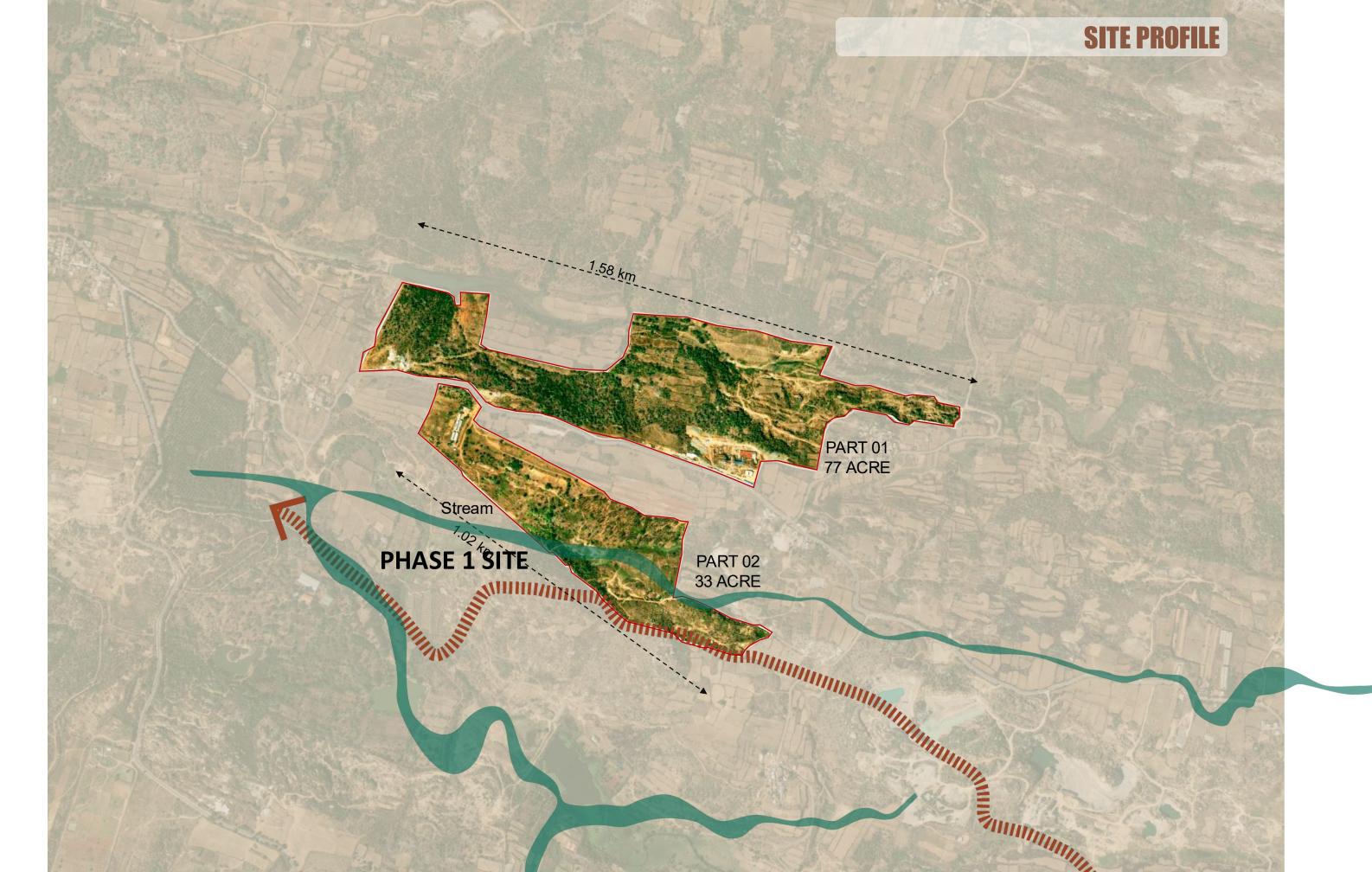




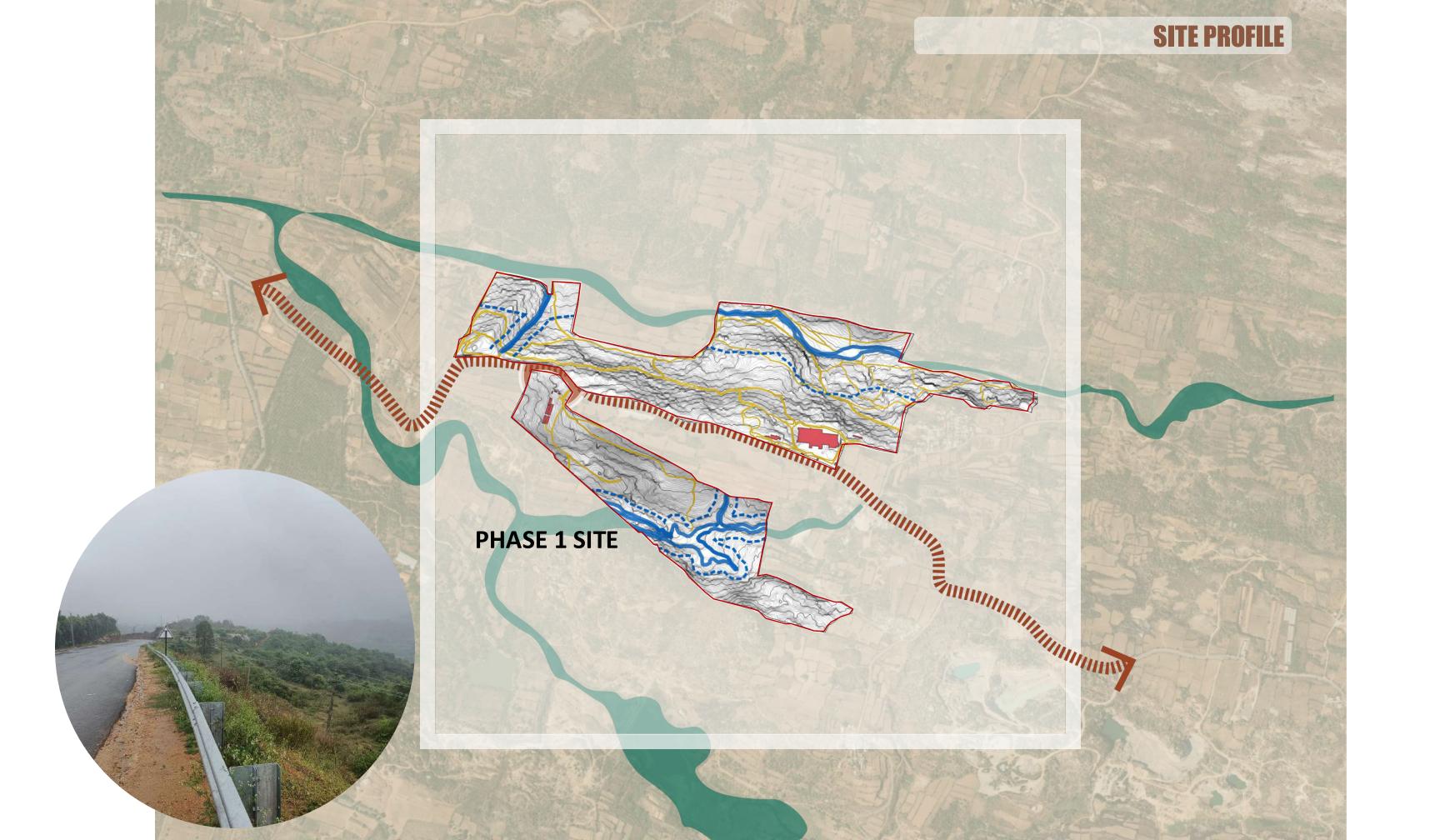
- 1. Proposed Site: PHASE 1 = 33 acres
- Proposed Campus location : Bannerghatta, Bangalore





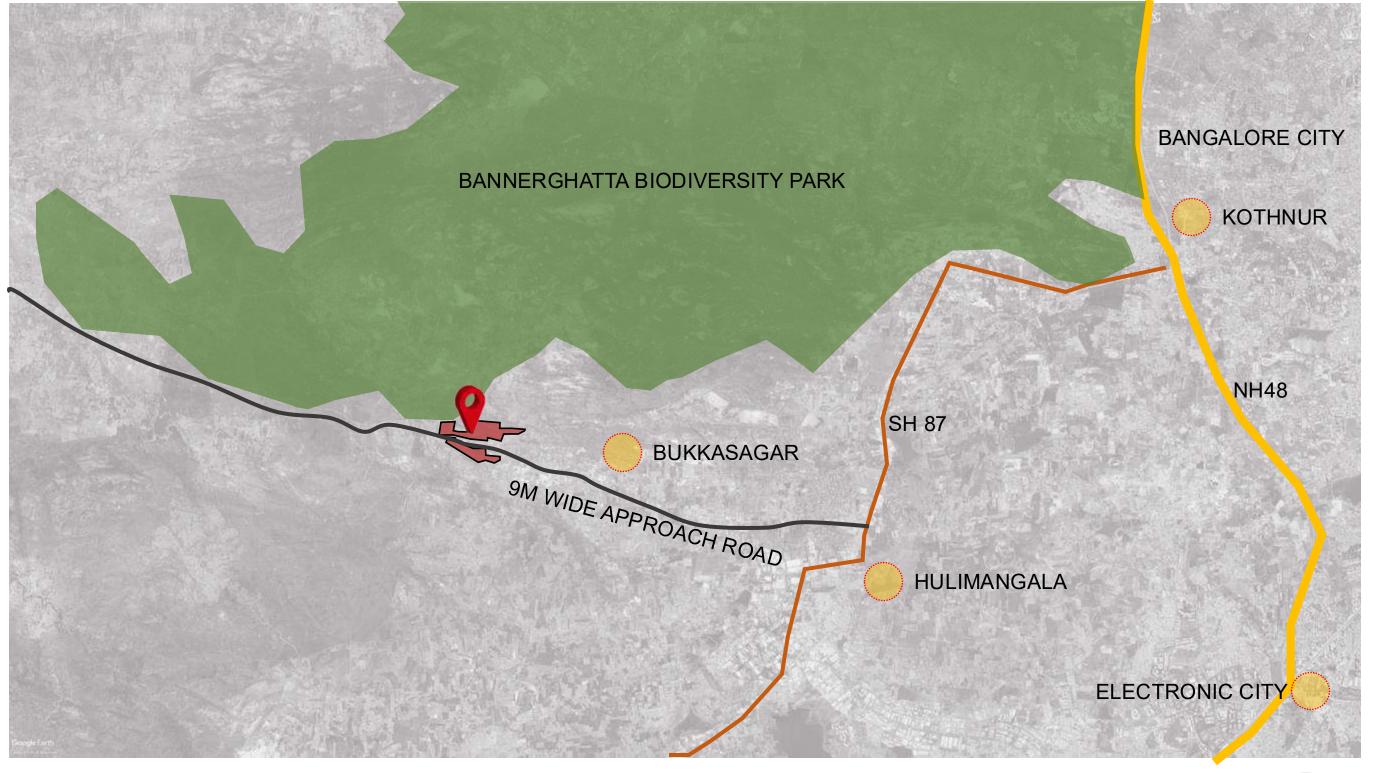








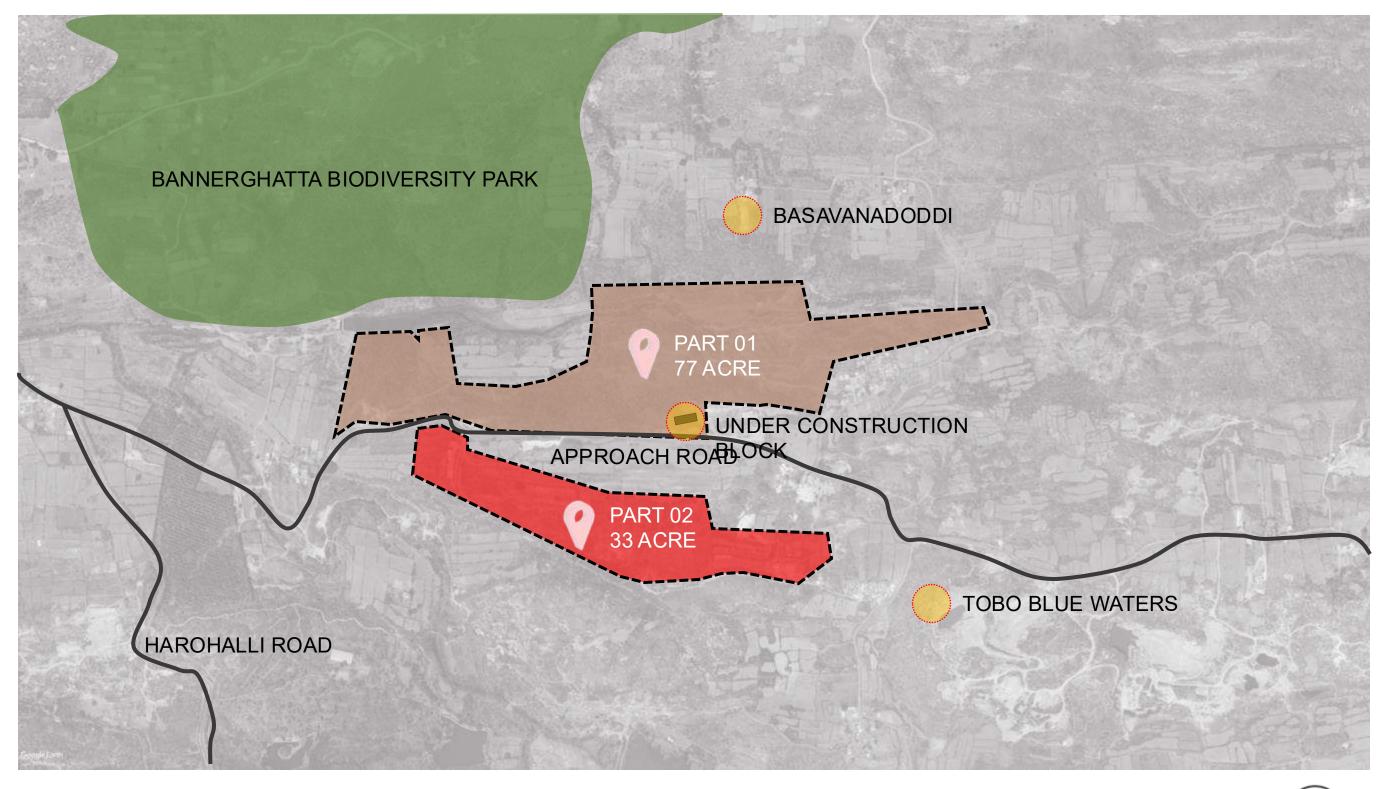
APPROACH







APPROACH





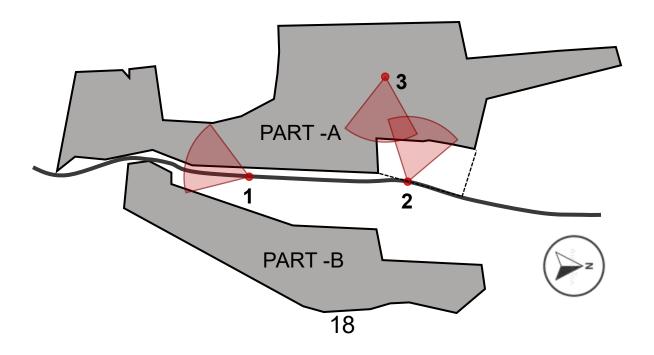


SITE SURROUNDING









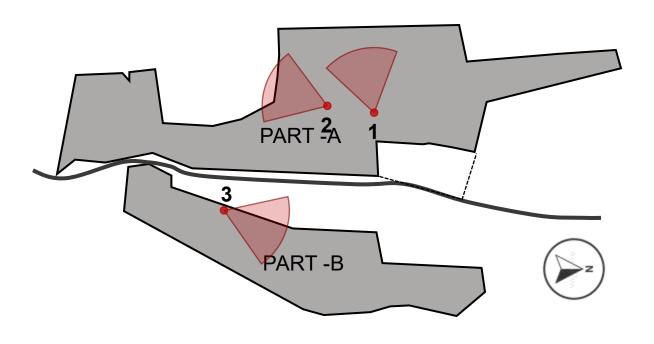


SITE SURROUNDING



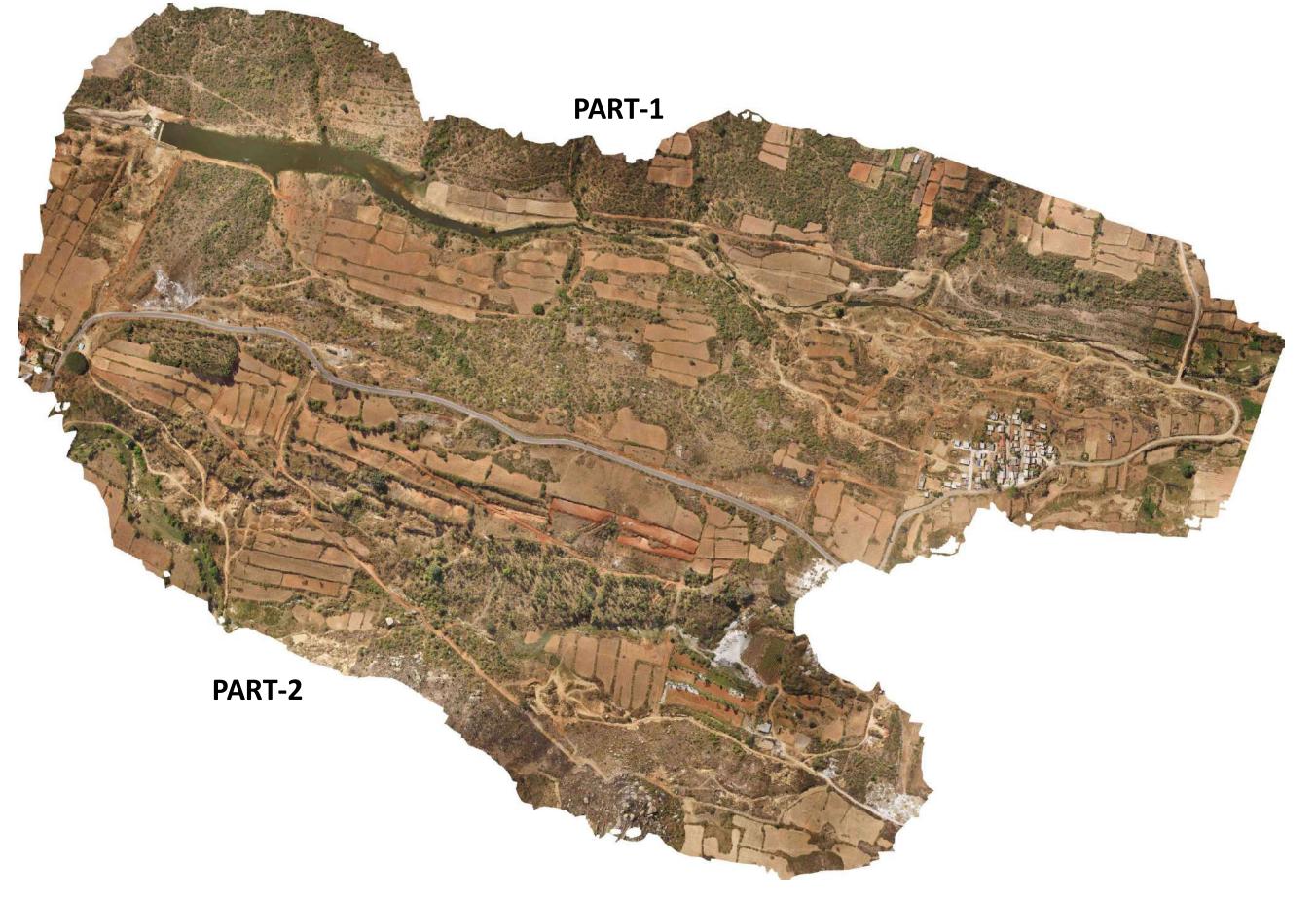






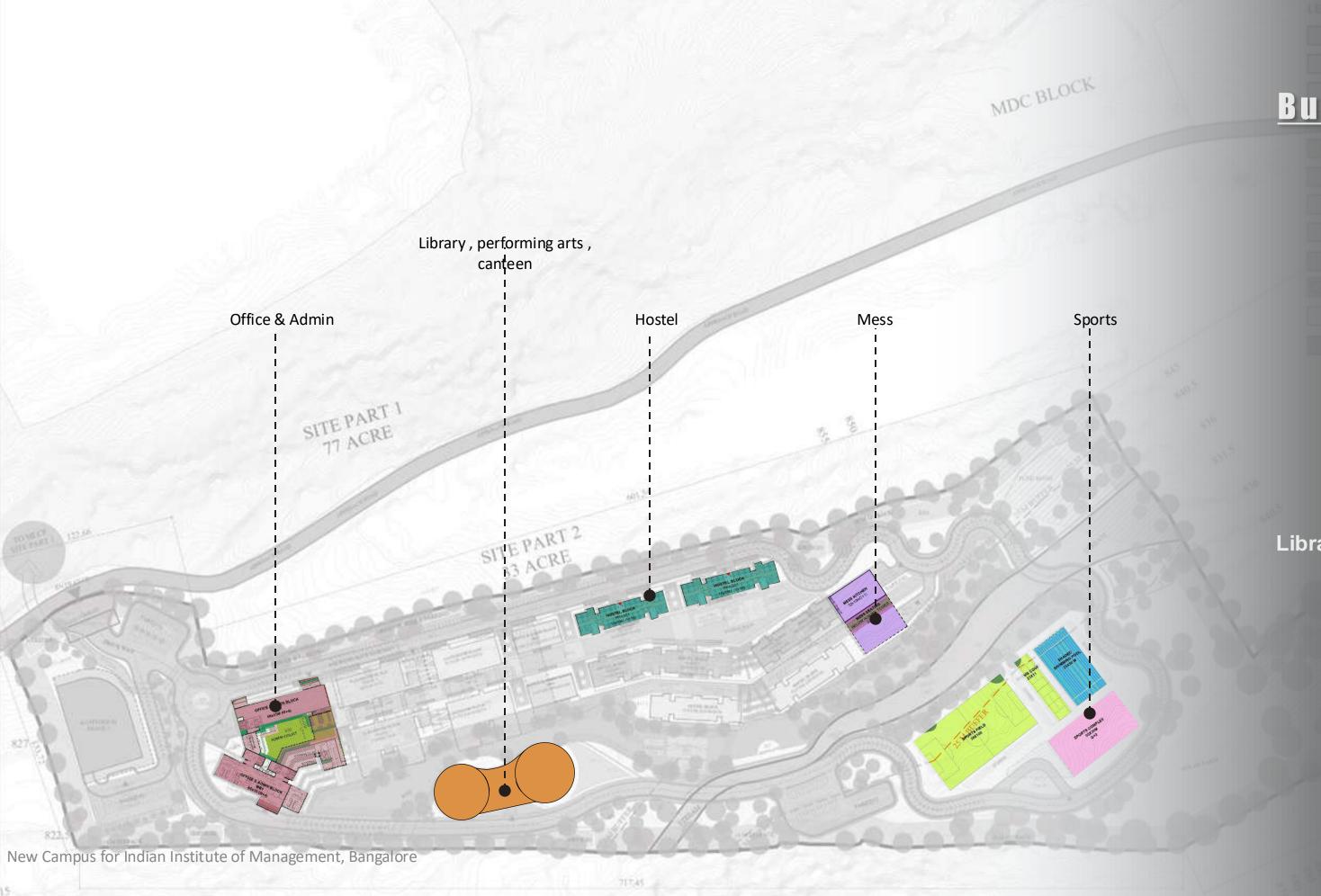


SURVEY PLAN AERIAL









Building Heights

As per fire norms

Administration Block (G+6) 27.6m

Hostel Block(G+10) 38.1 m

> Mess Block (G+1) 9.6m

Sports Block(G+1) 9.6m

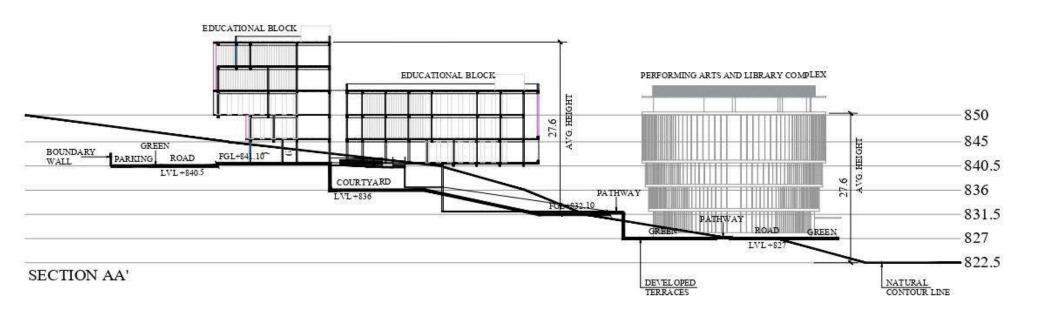
Library, performing arts &Cafe Block(G+5) 27.6 m

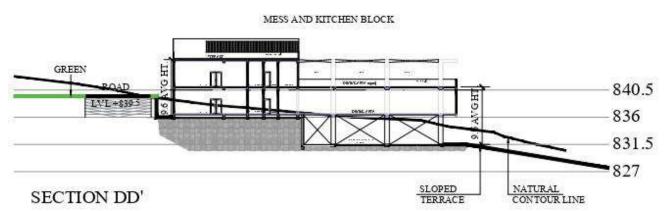


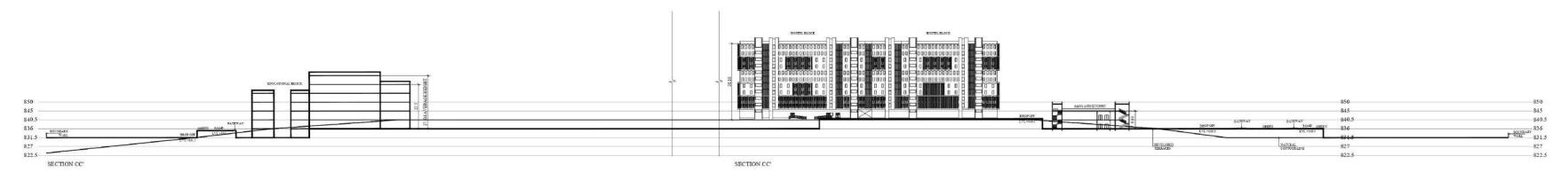




SITE SECTIONS





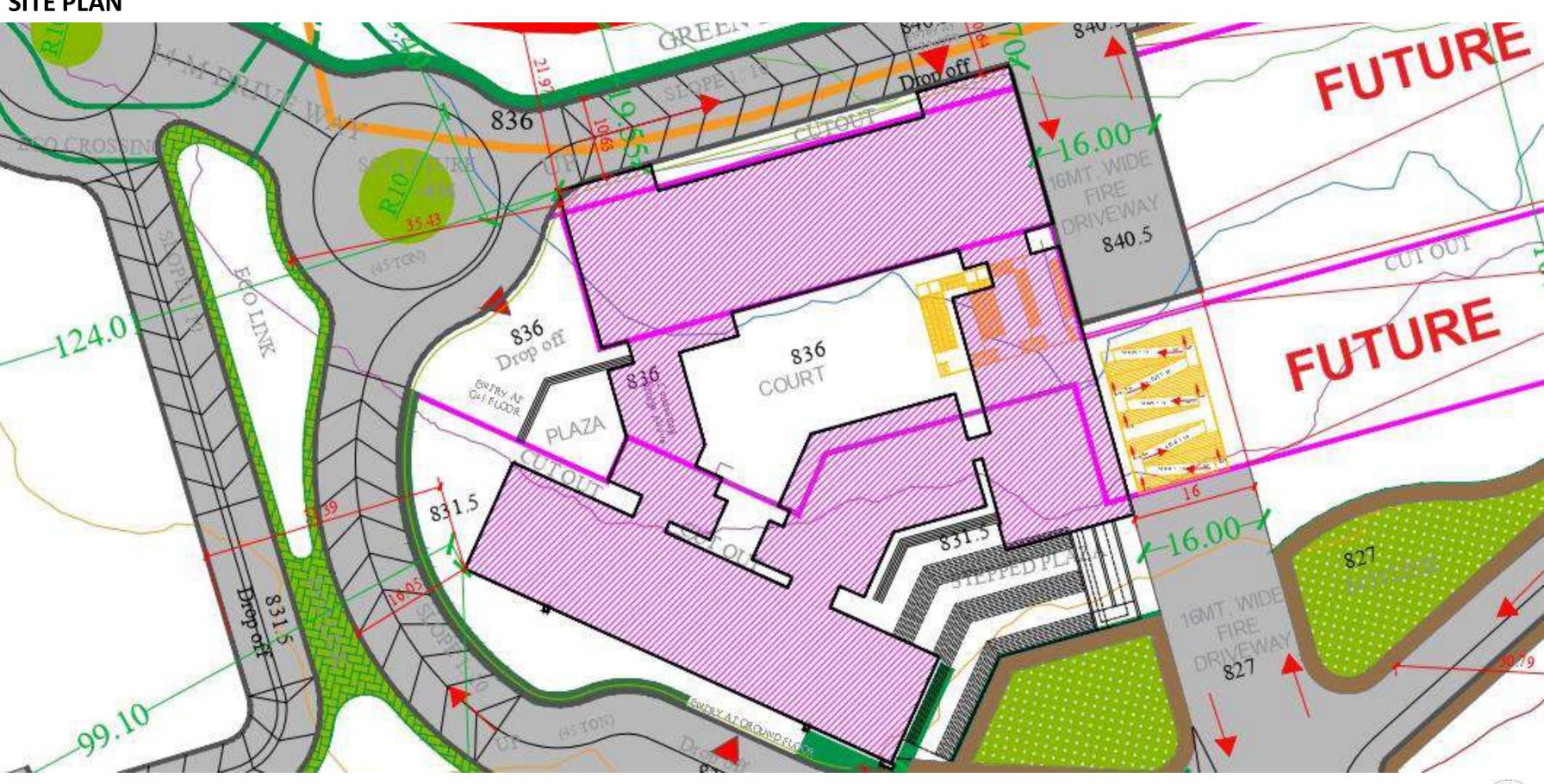








SITE PLAN



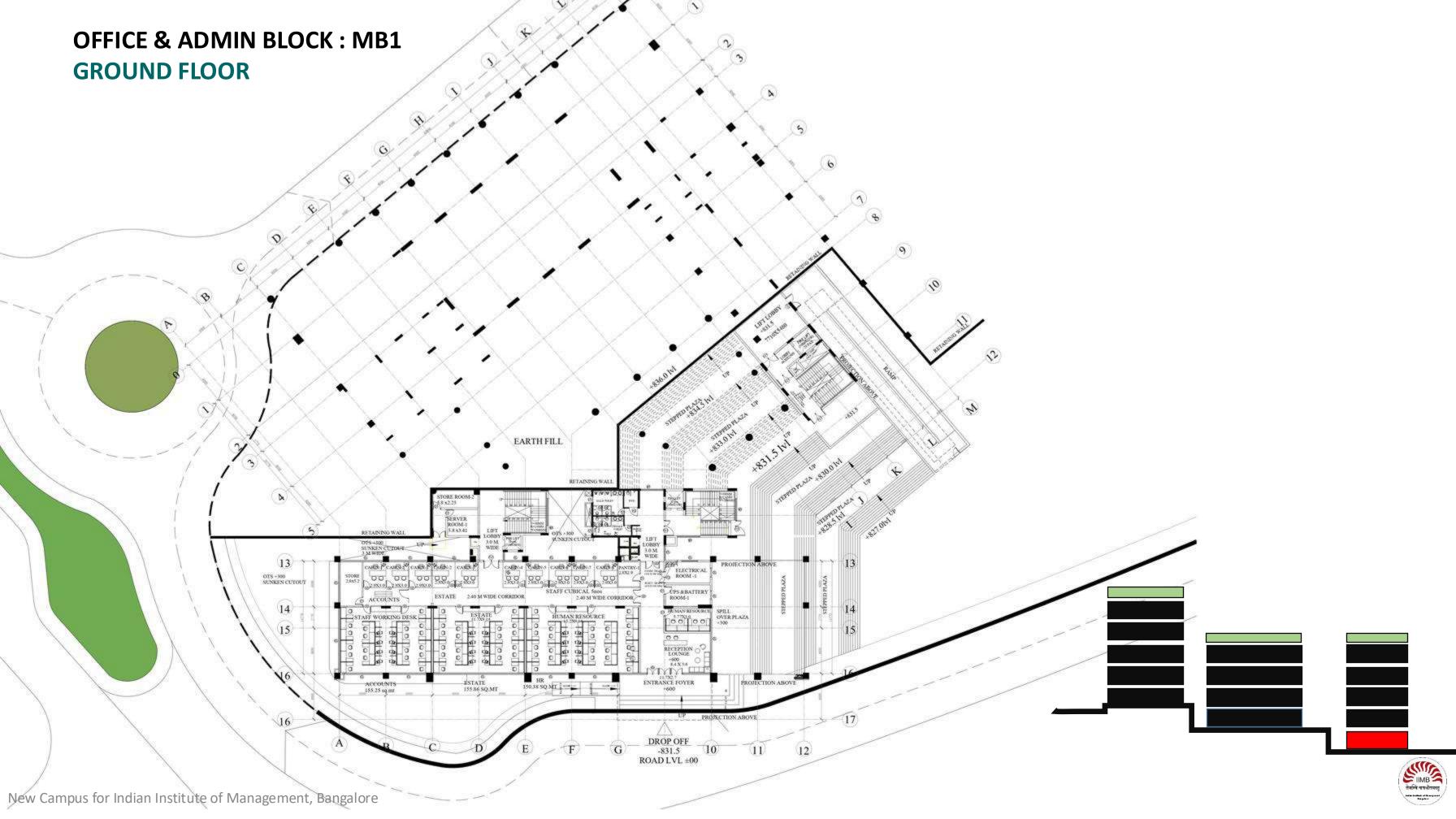


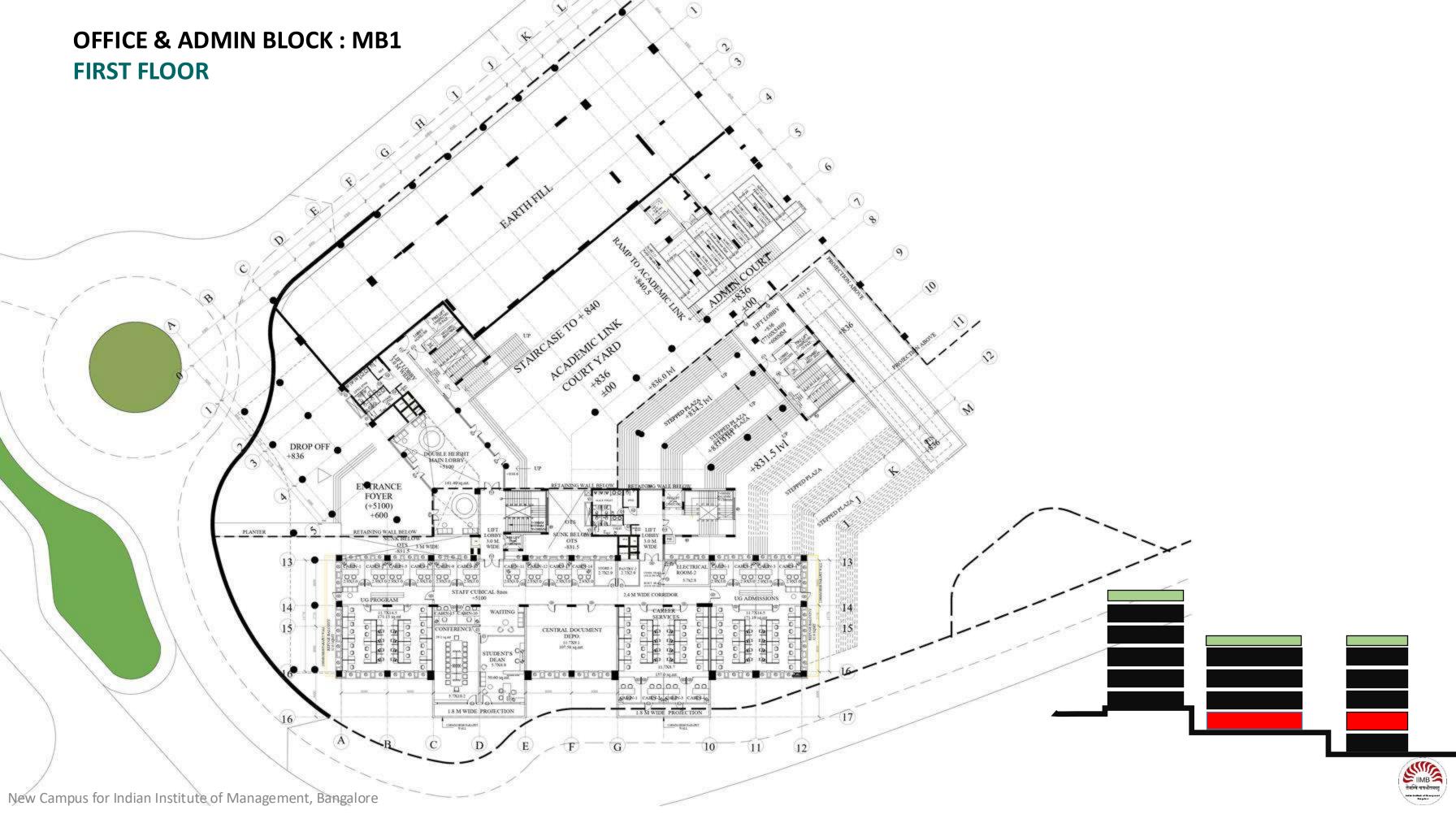
OFFICE & ADMIN BLOCK: MB1

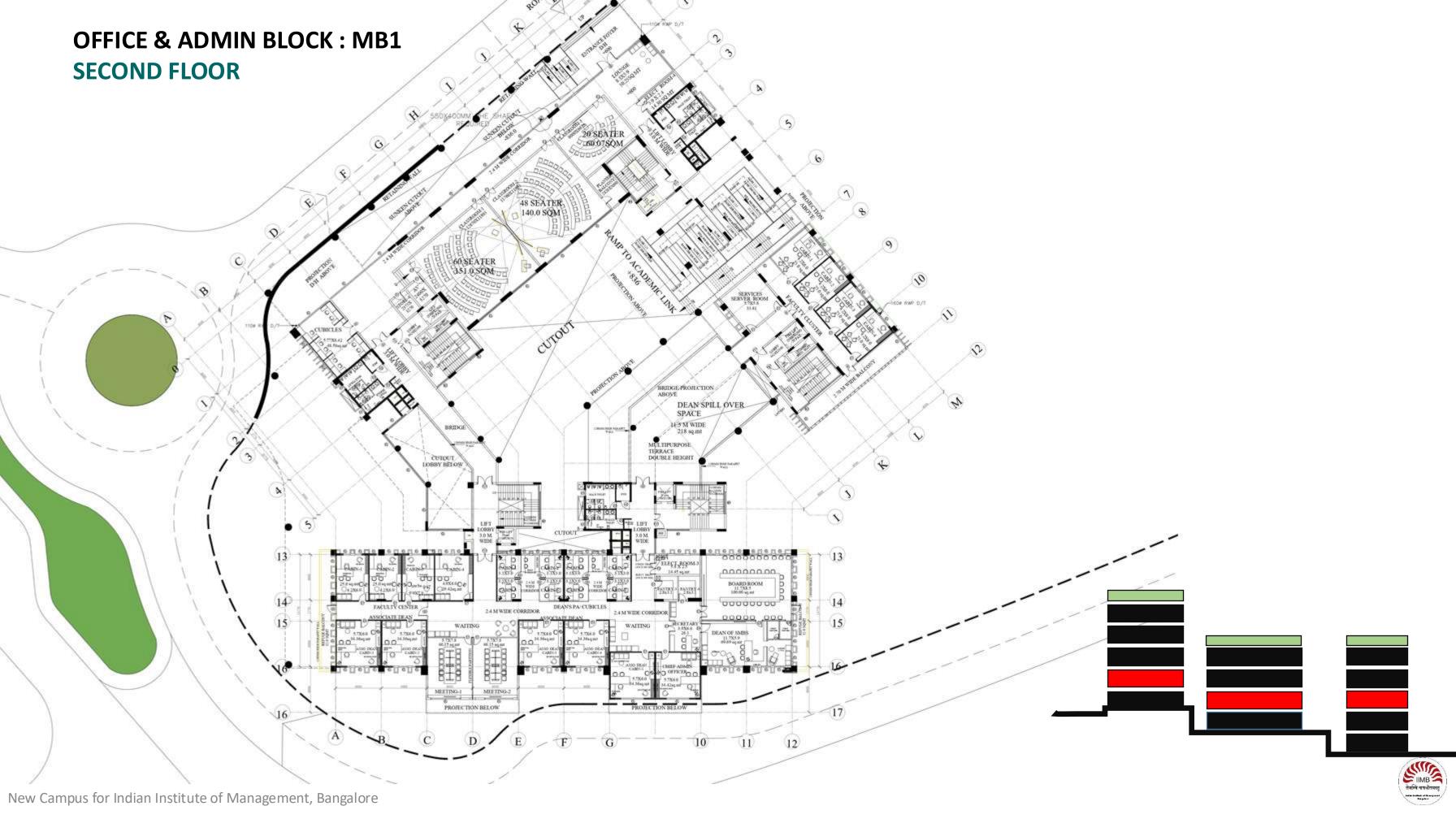
AREA SUMMARY AS PER DESIGN

Educational Block		
		AS PER DESIGN
S.NO		TOTAL BUILT-UP
	FLOOR	AREA SQ.MT.
1	GROUND FLOOR	1106.5
2	FIRST FLOOR	1780.23
3	SECOND FLOOR	2890.72
4	THIRD FLOOR	2941.24
5	FOURTH FLOOR	3394.82
6	FIFTH FLOOR	1490.29
7	SIXTH FLOOR	1168.92
8	TERRACE/ MUMTY FLOOR	160.44
	TOTAL	14933.16

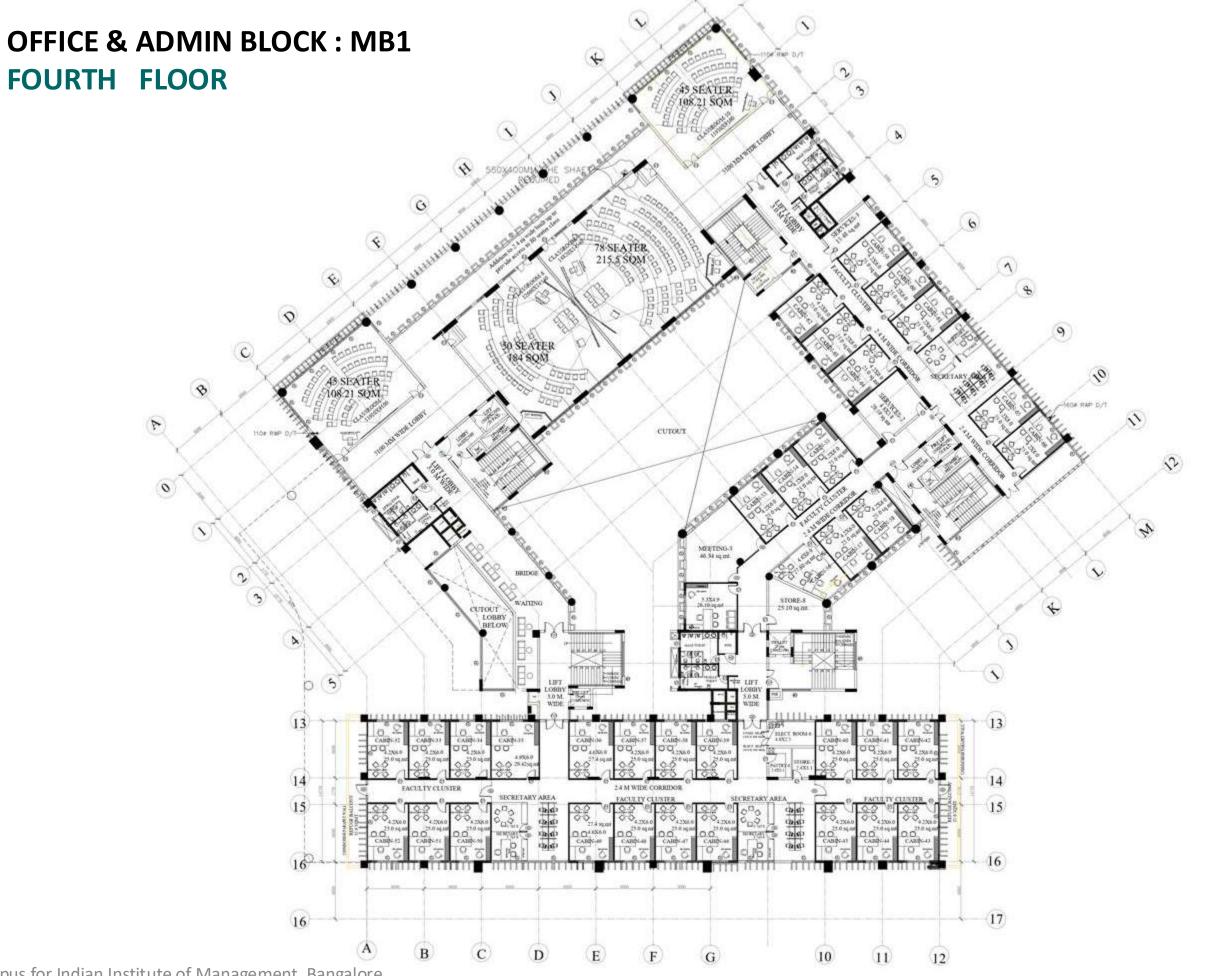






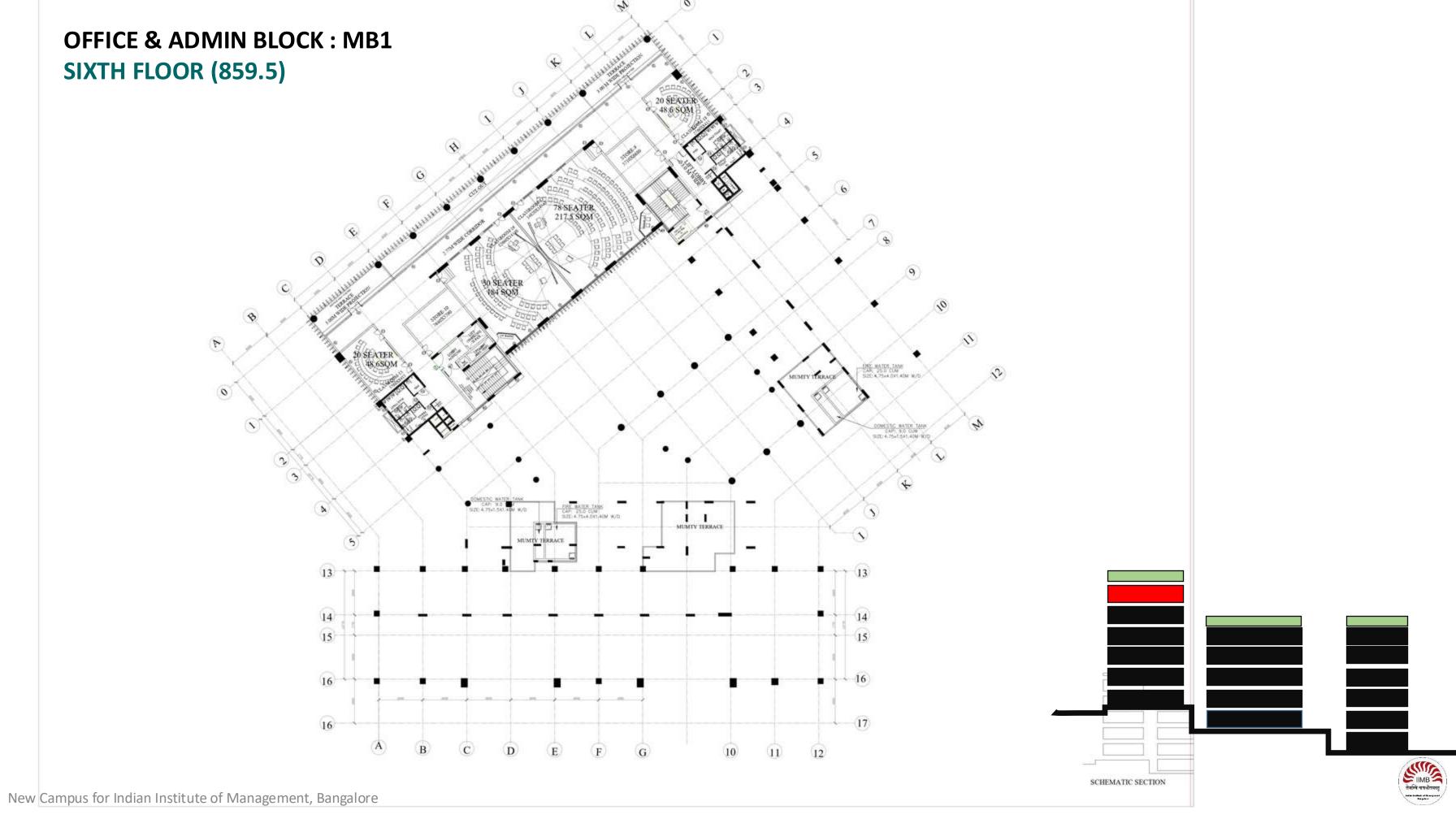






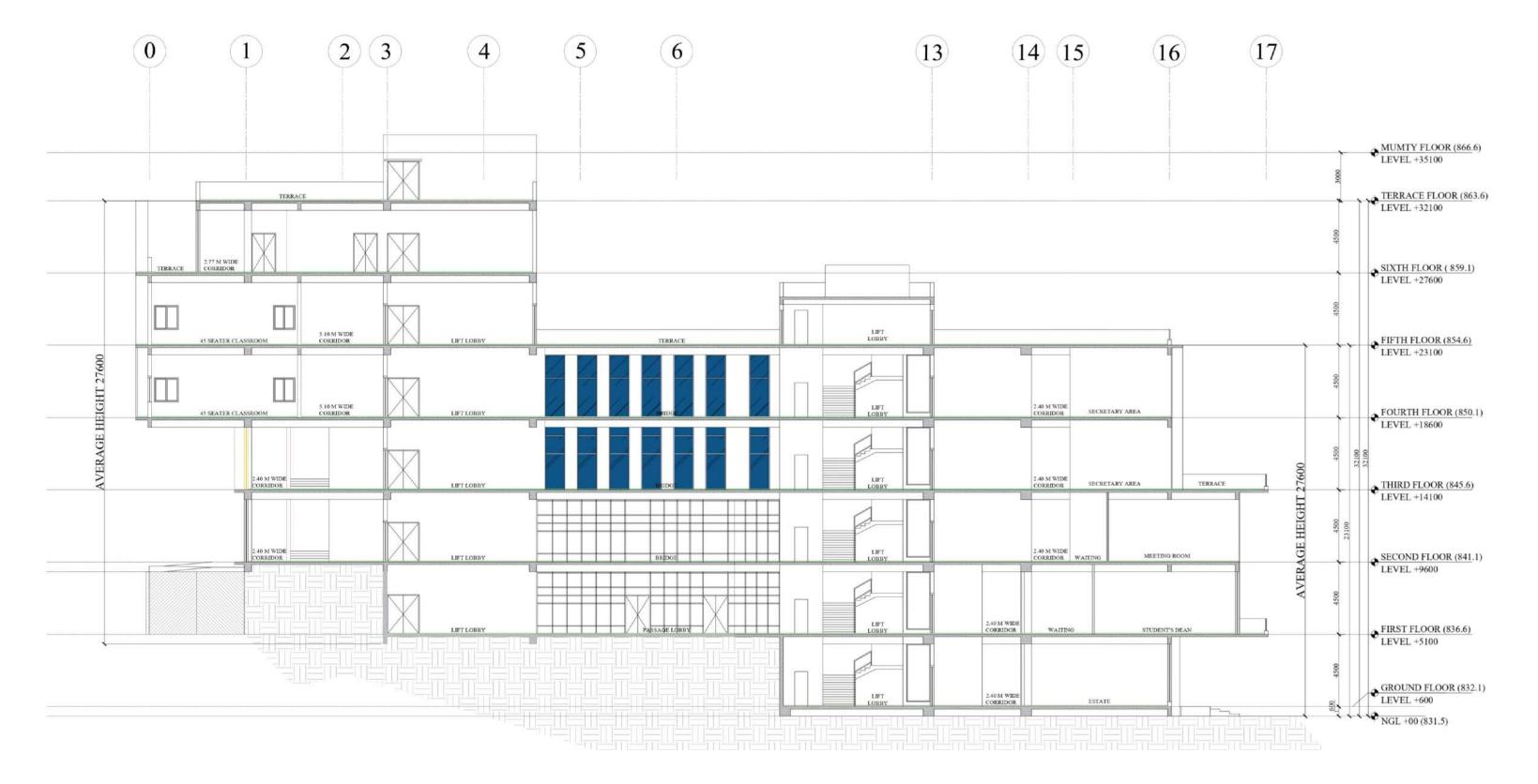






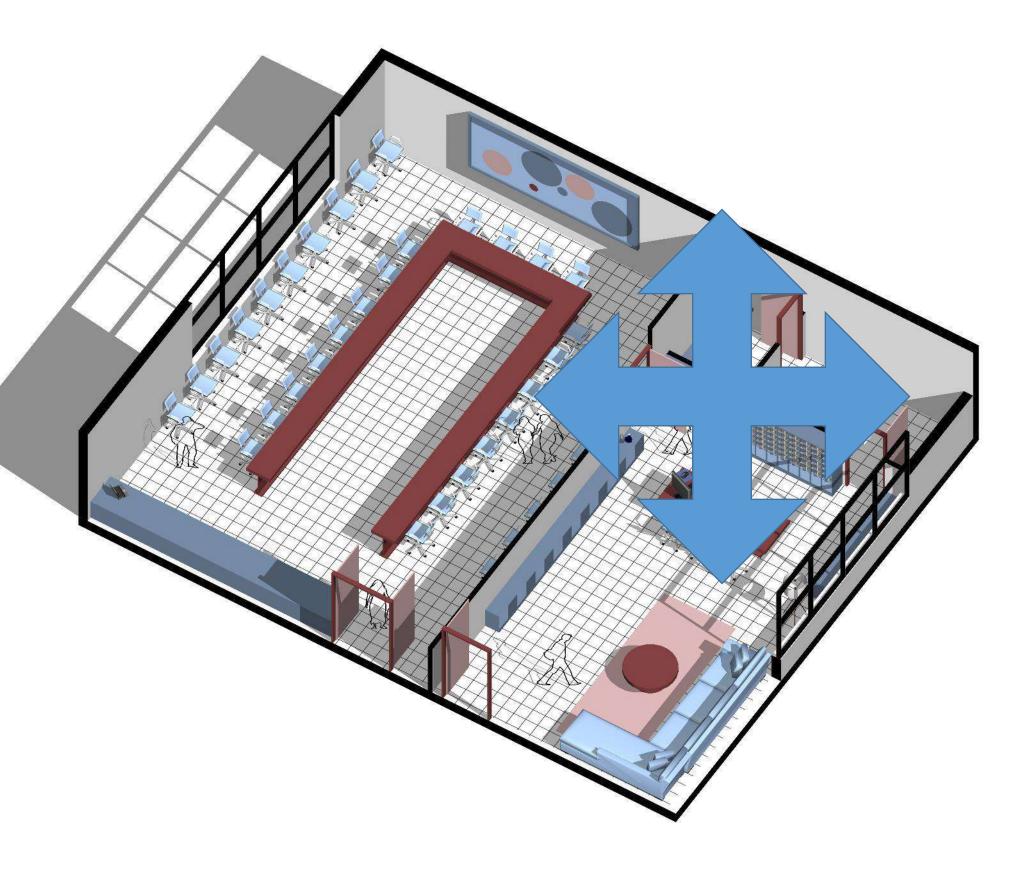
OFFICE & ADMIN BLOCK: MB1

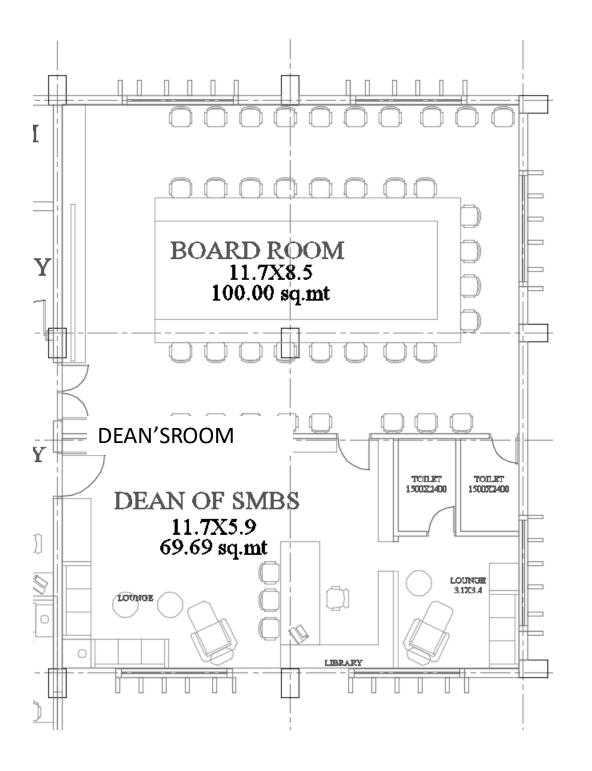
SECTION





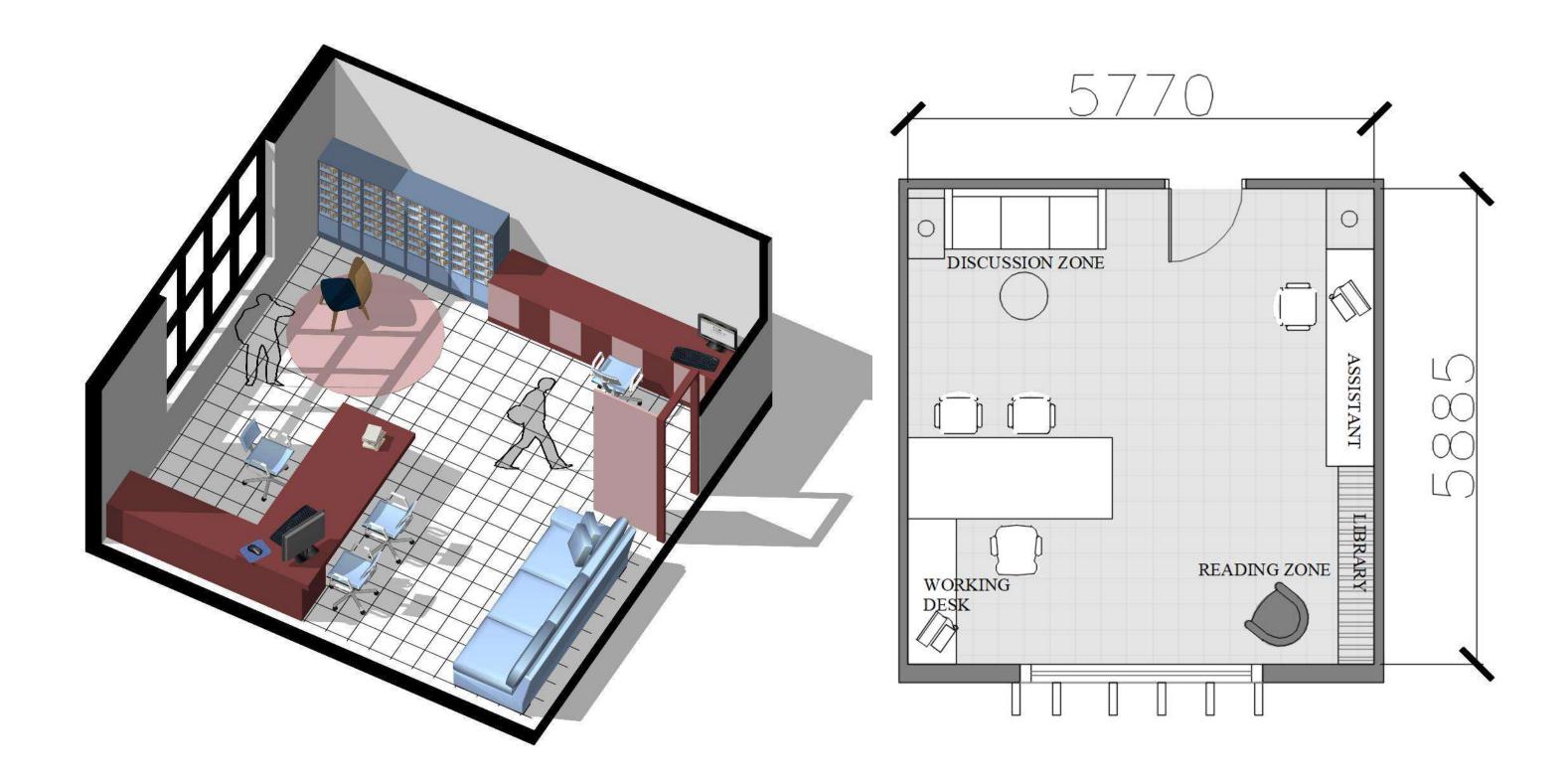
DEAN'S ROOM





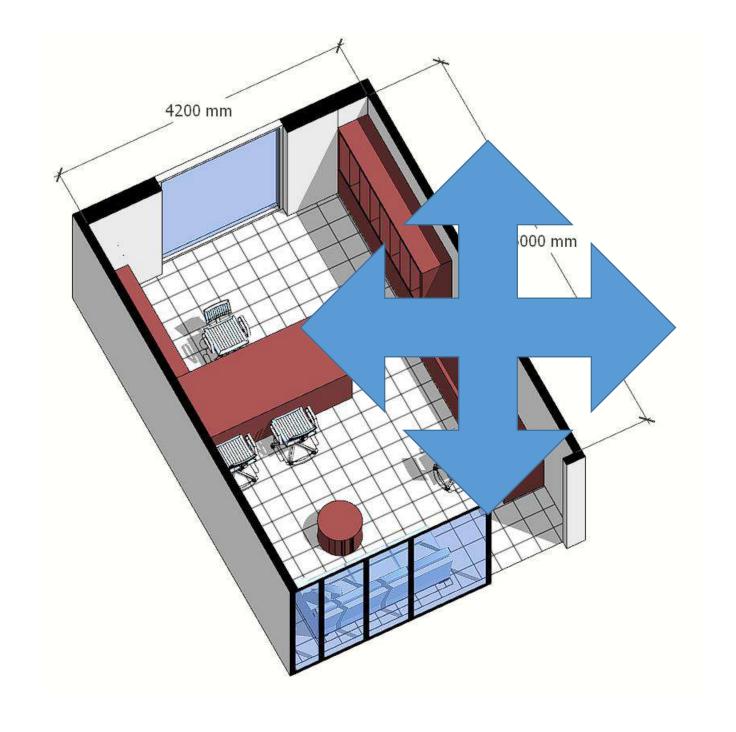


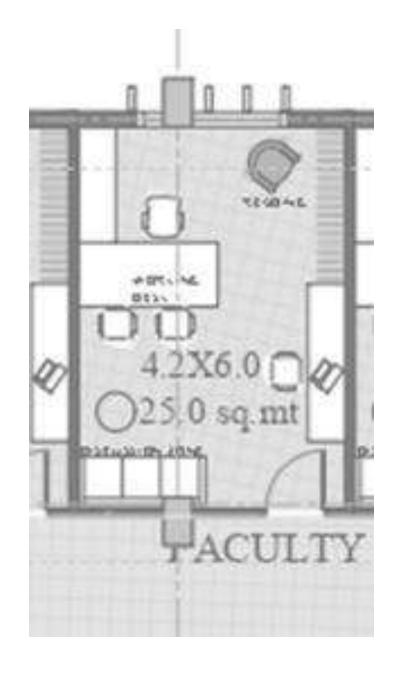
ASSOCIATE DEAN





FACULTY ROOM

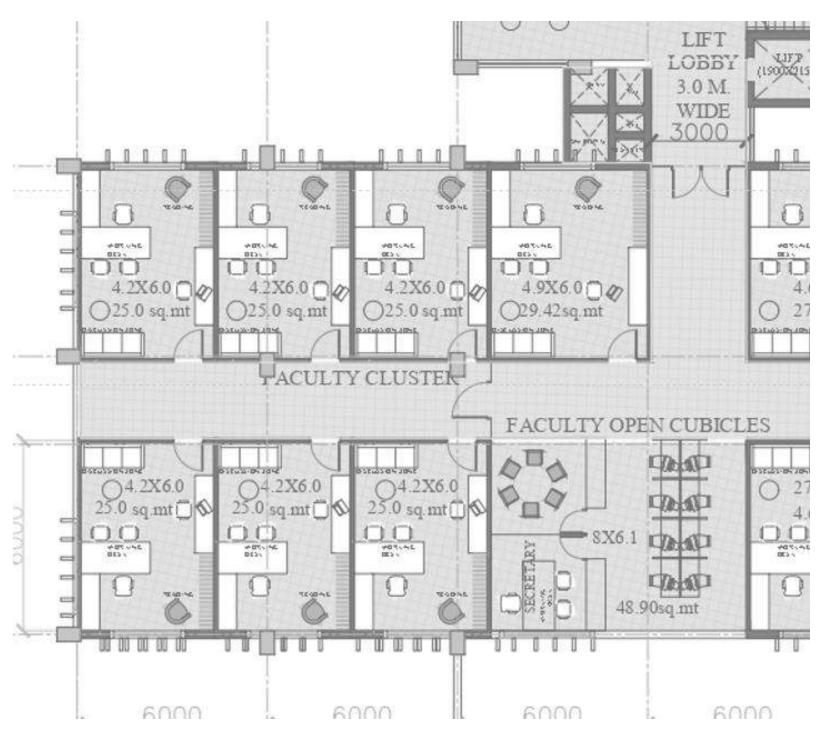






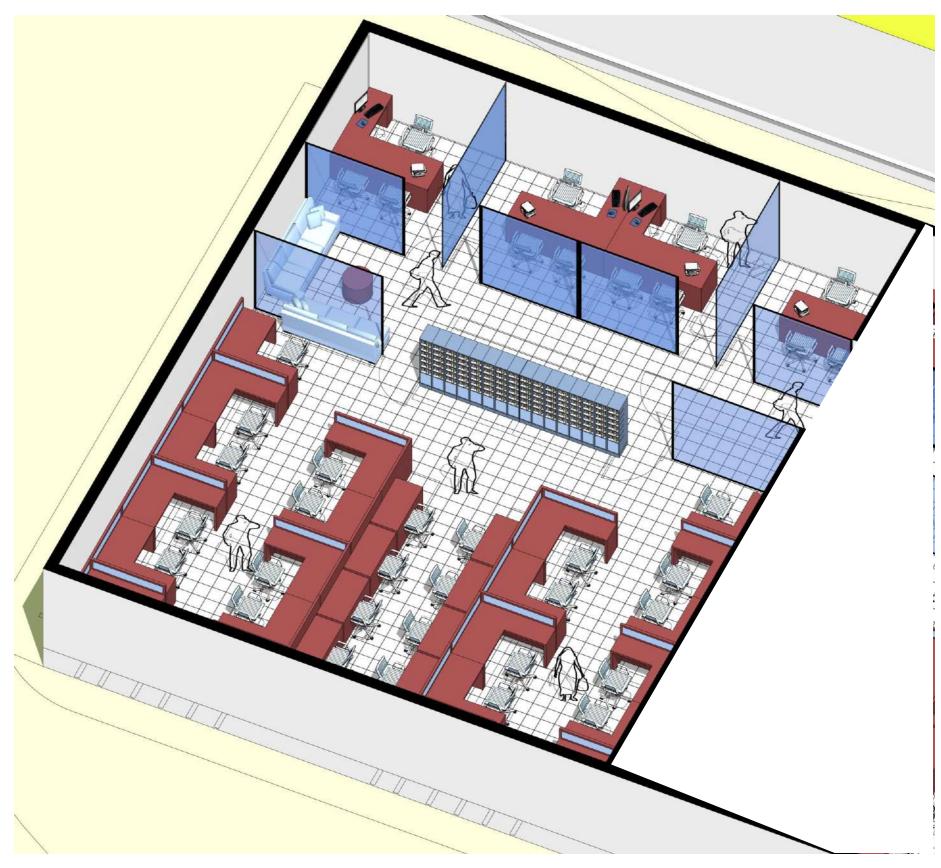
FACULTY CLUSTER

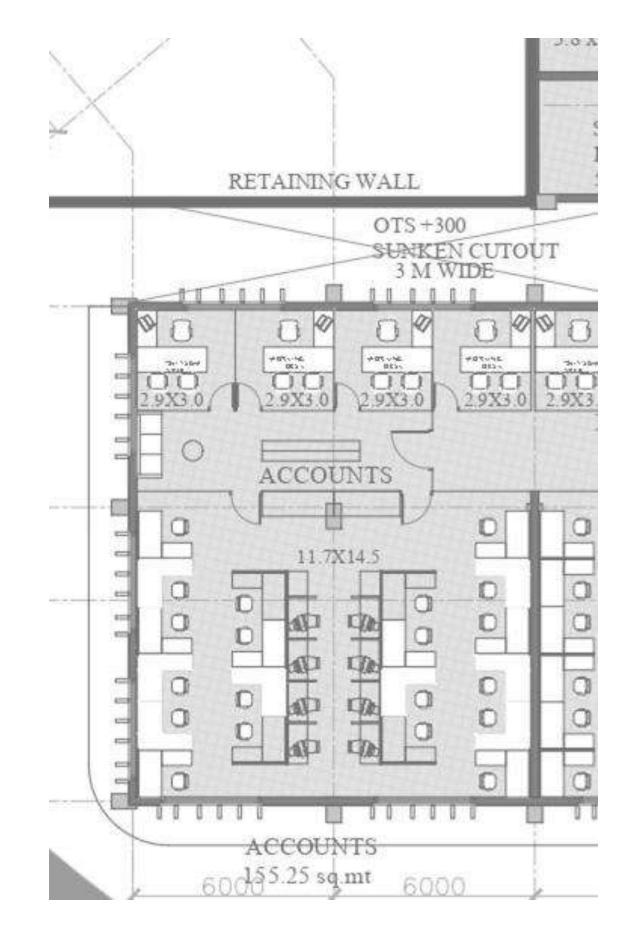






ACCOUNTS SECTION



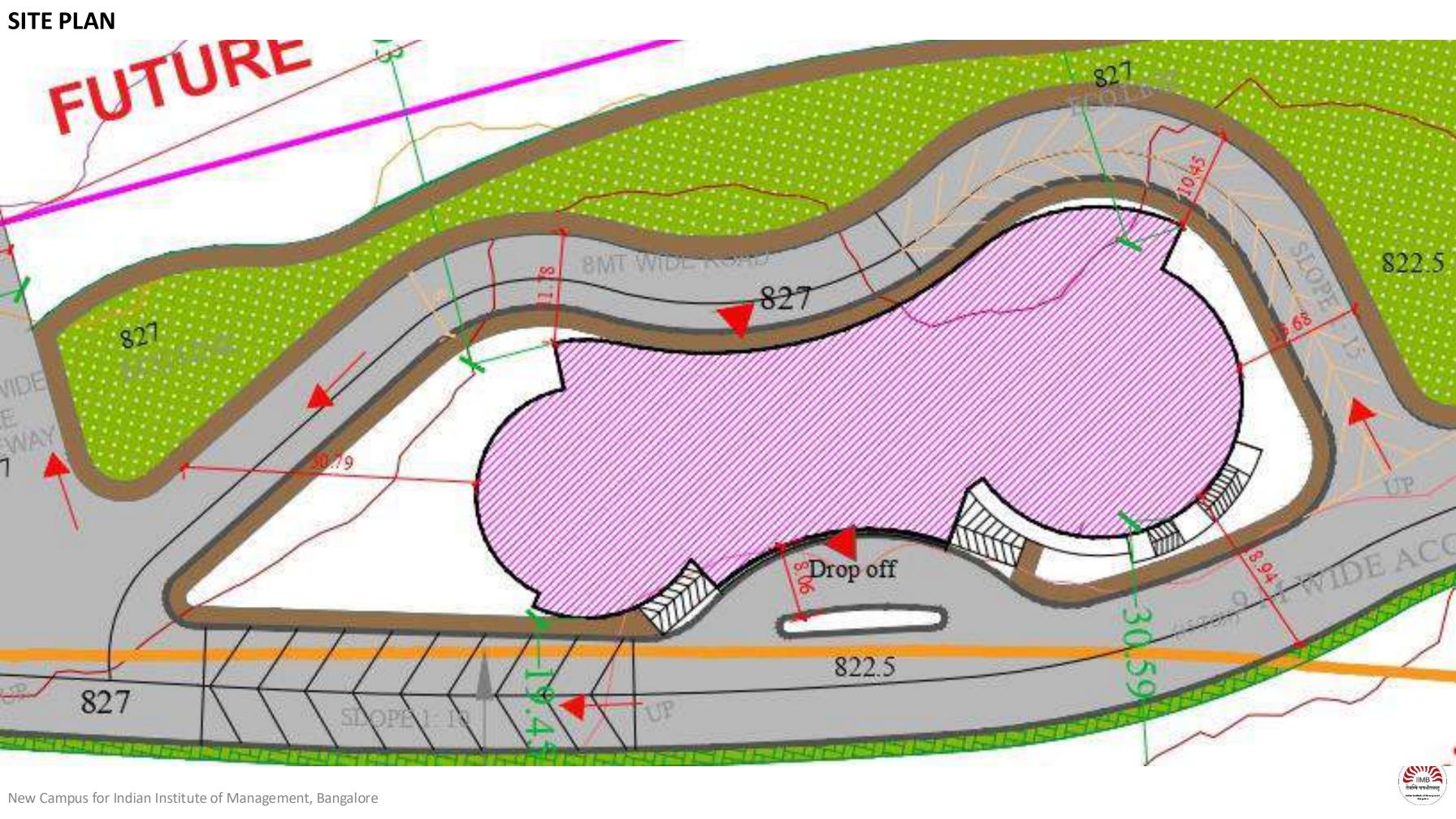




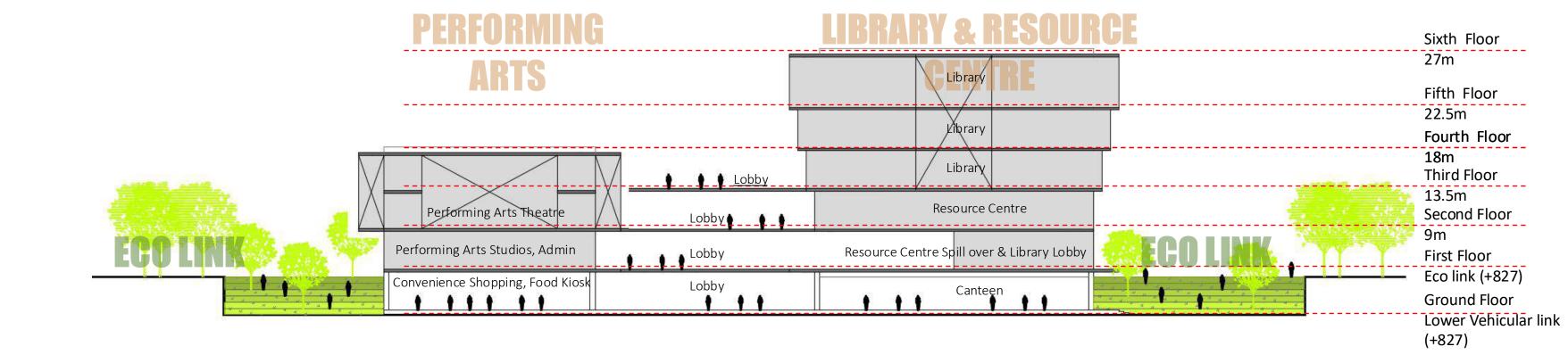








MB2, LIBRARY & RESOURCE CENTRE STACK SECTION



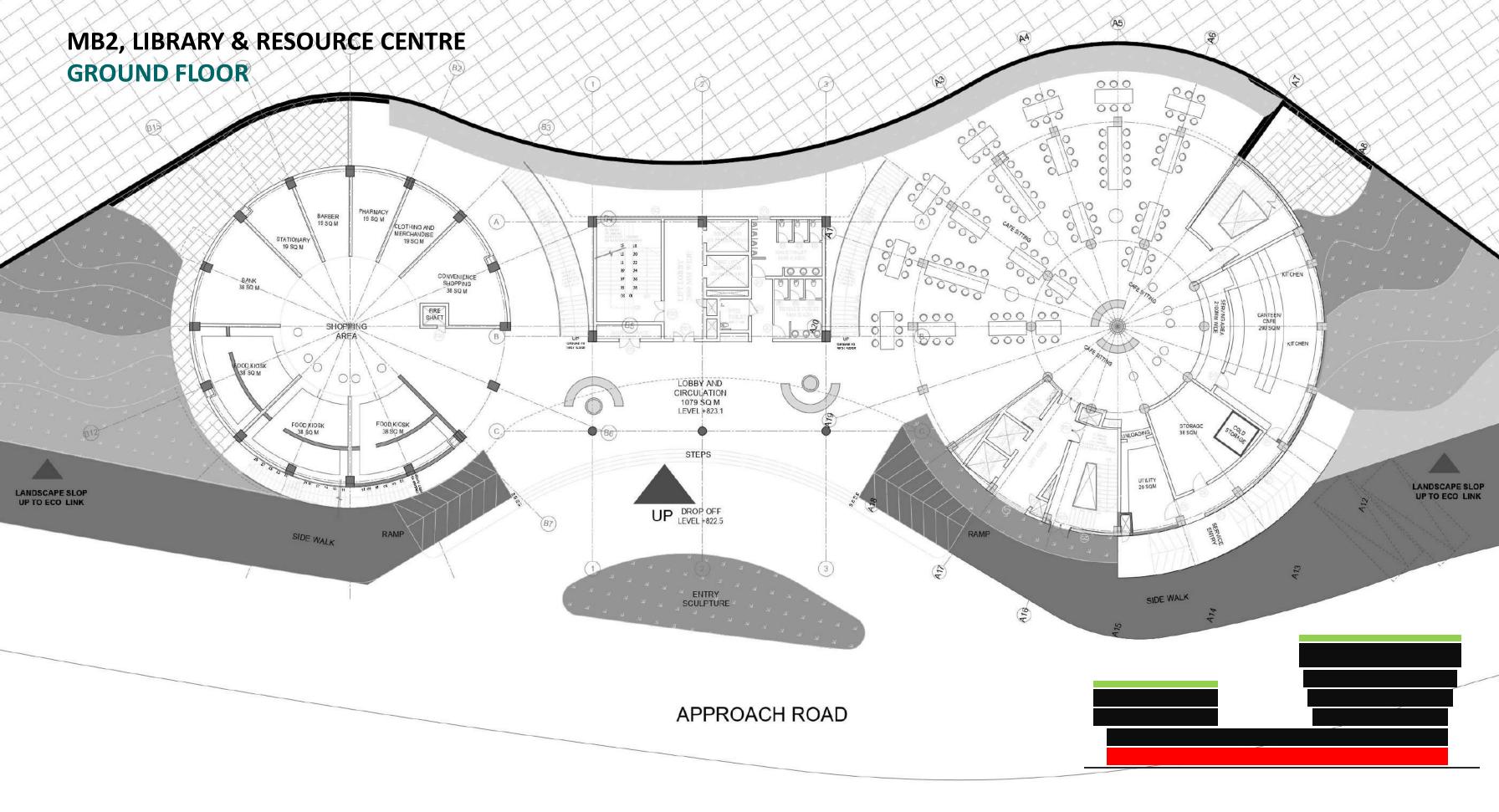


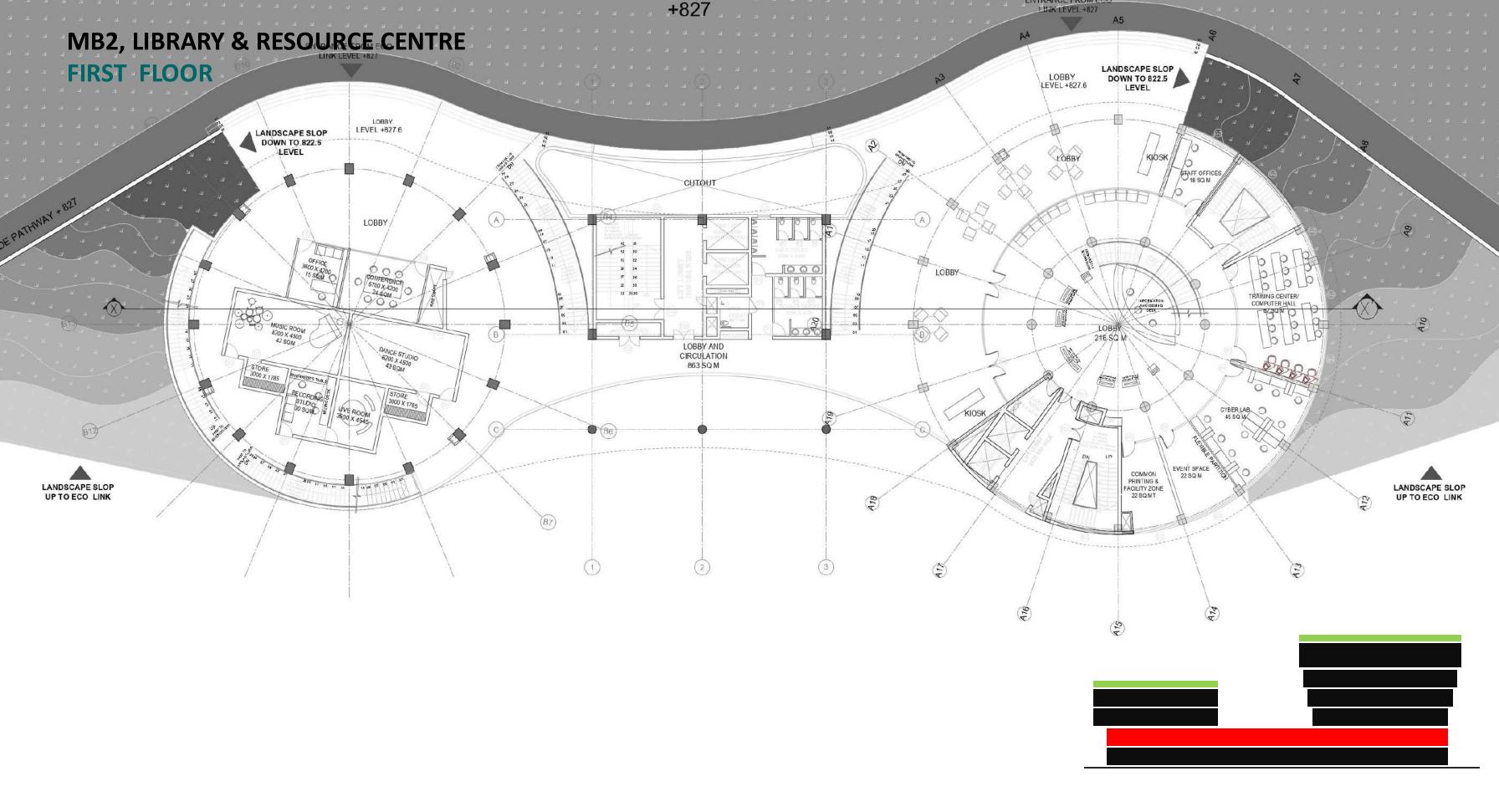
MB2, LIBRARY & RESOURCE CENTRE

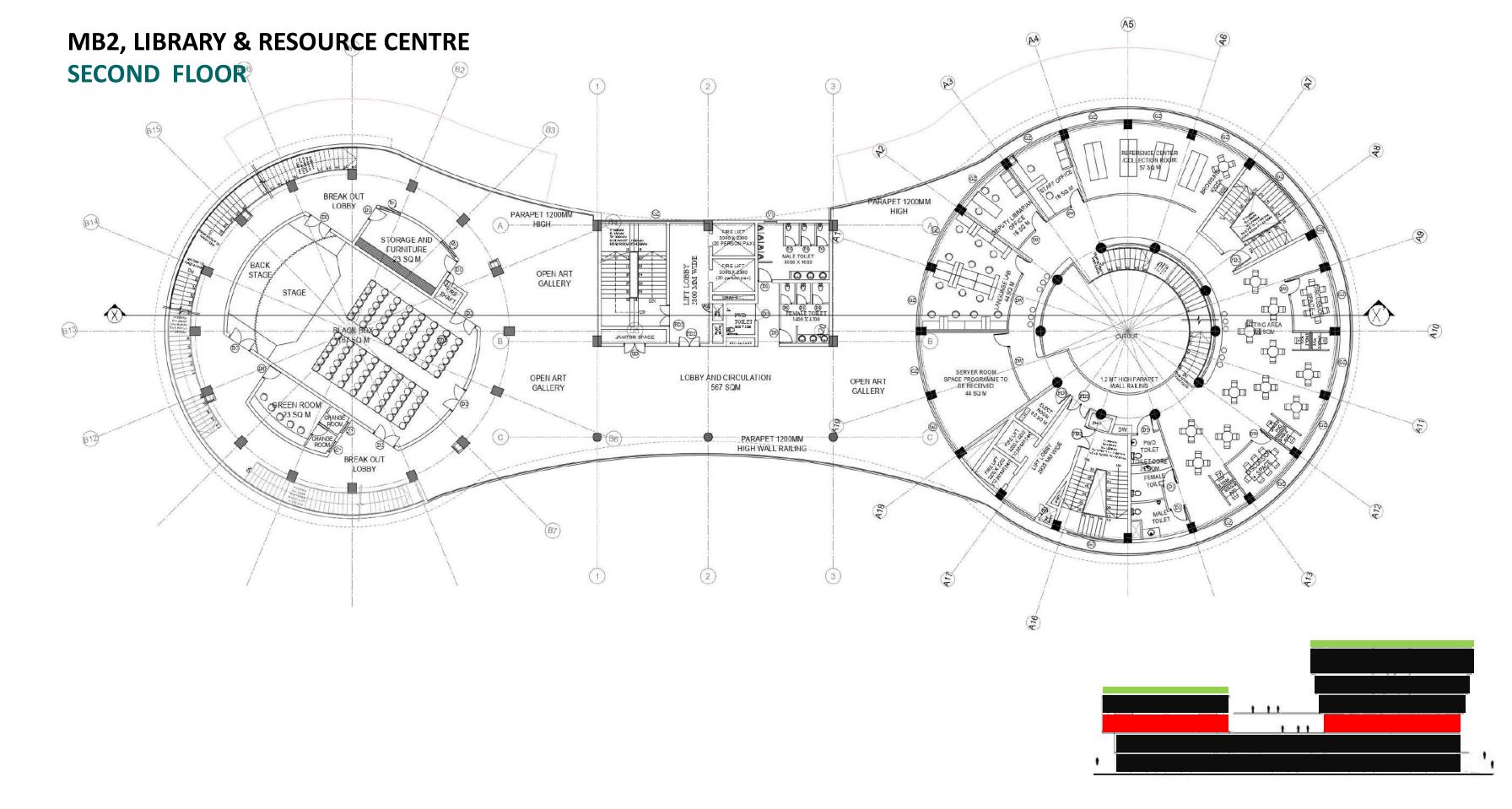
PROGRAM REQUIREMENT

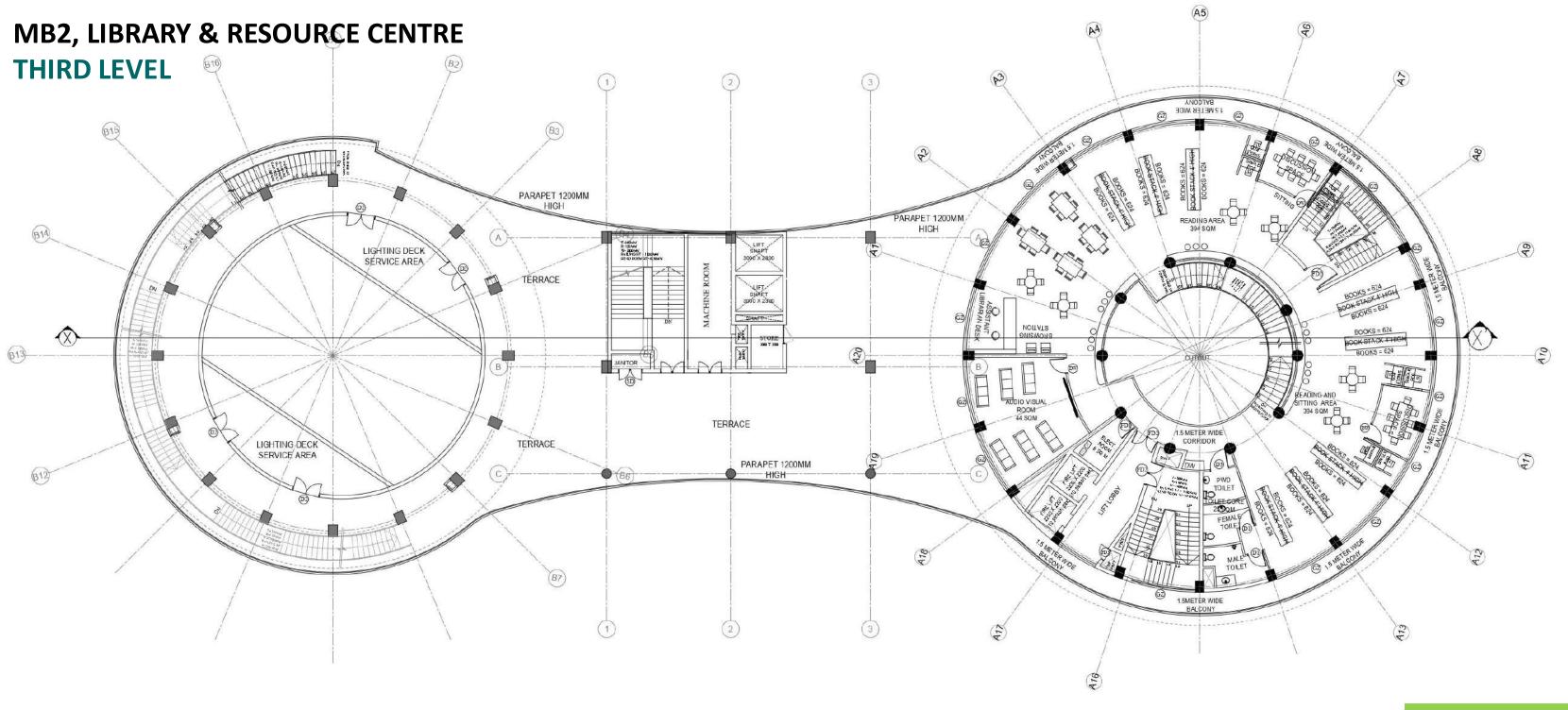
LIBRARY AND PERFORMING ARTS COMPLEX			
		AS PER DESIGN	
S.NO		TOTAL BUILT-UP	
	FLOOR	AREA SQ.MT.	
1	GROUND FLOOR	2025.00	
2	FIRST FLOOR	1785.00	
3	SECOND FLOOR	1706.00	
4	THIRD FLOOR	971.00	
5	FOURTH FLOOR	848.00	
6	FIFTH FLOOR	848.00	
7	TERRACE/ MUMTY FLOOR	91.07	
	TOTAL	8274.07	

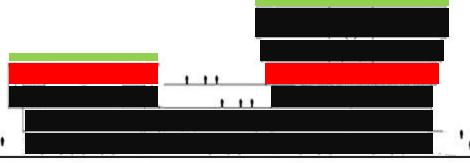


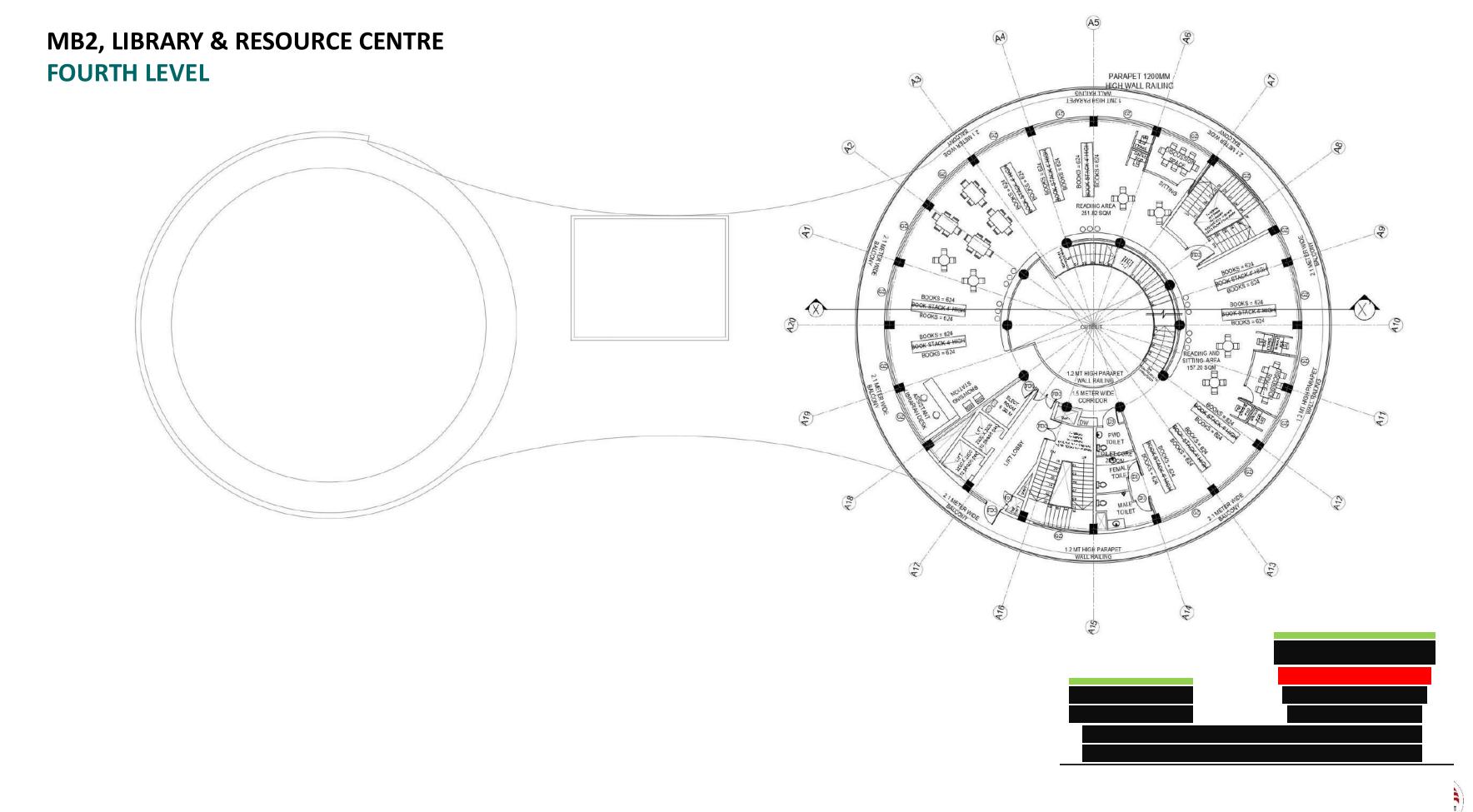




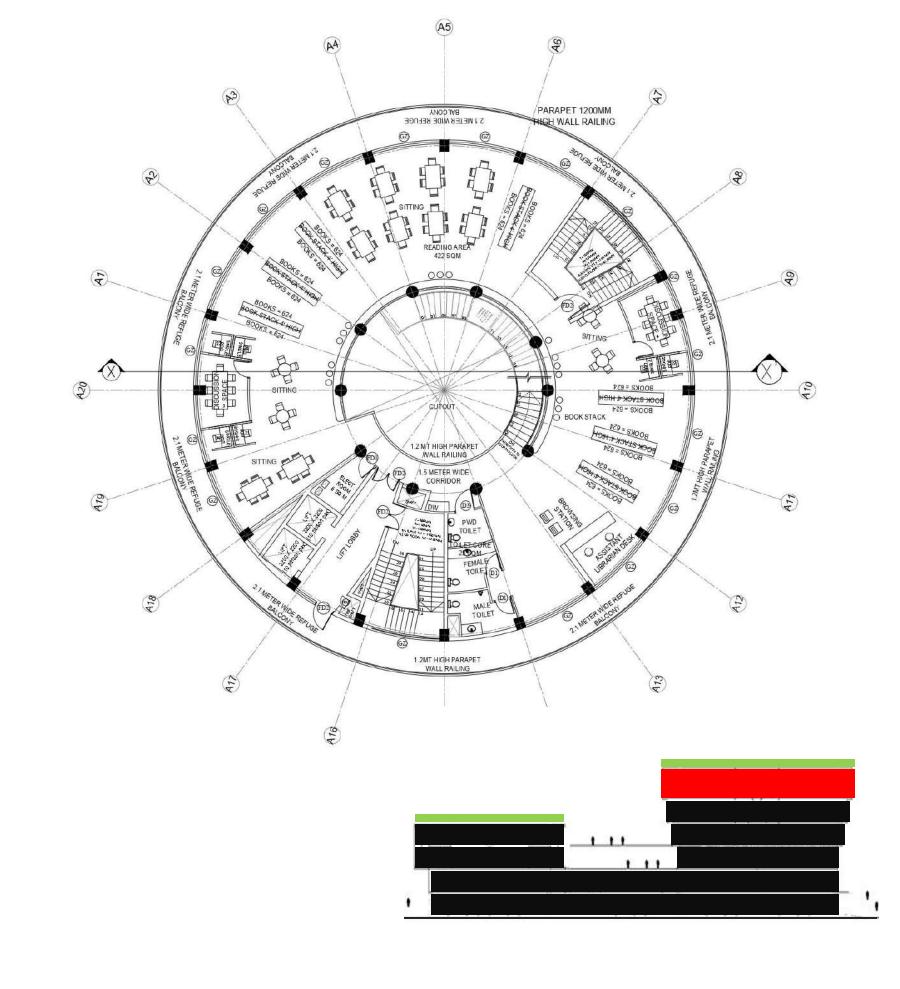




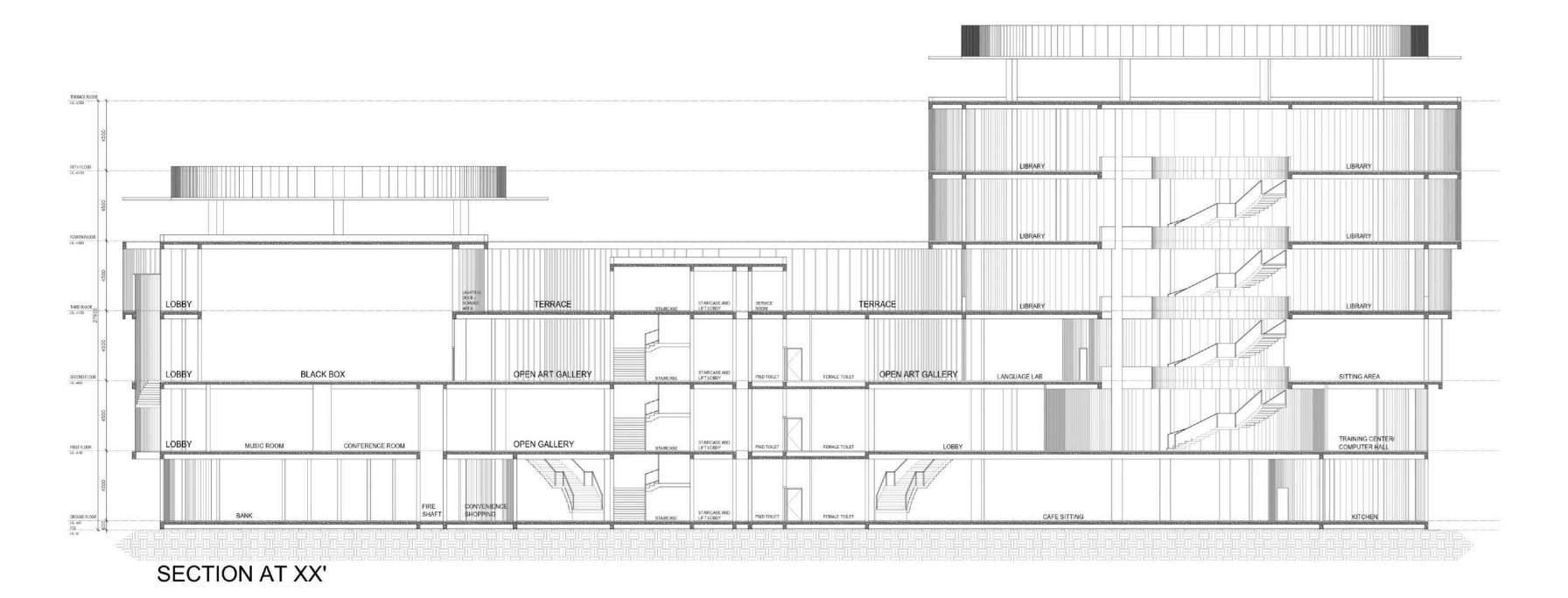




MB2, LIBRARY & RESOURCE CENTRE FIFTH LEVEL



MB2, LIBRARY & RESOURCE CENTRE SECTION









SITE PLAN (4: 708) 840.5 Drop off 840.5 Drop off STUDENT PLAZA SMT WIDE ROAD rop off COURT SXISM 845 840.5 STUDENT PLAZA SMT WIDE ROAD

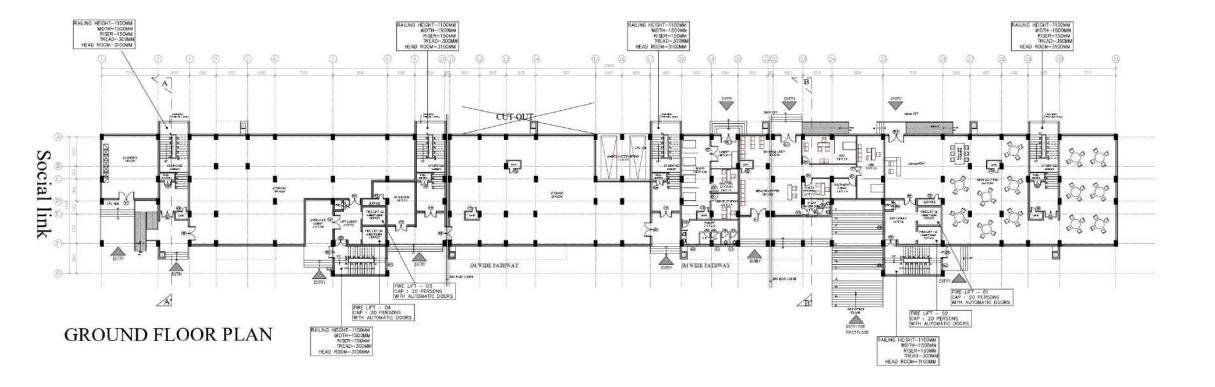
AREA SUMMARY AS PER DESIGN

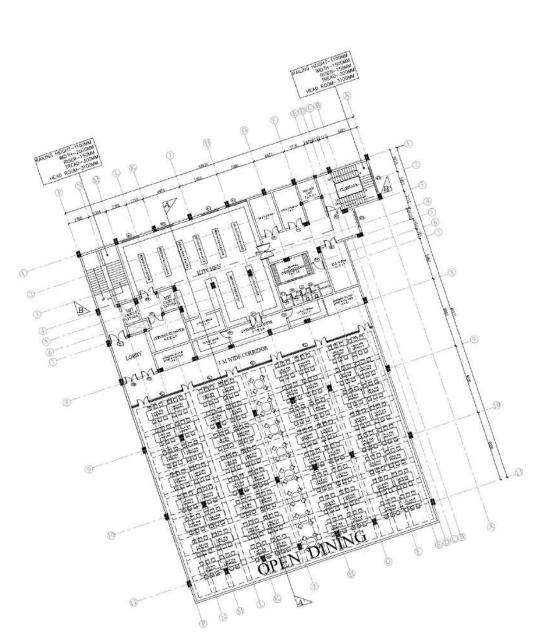
HOSTEL BLOCK		
S.NO	FLOOR	AS PER DESIGN
		TOTAL BUILT-UP
		AREA SQ.MT.
1	GROUND FLOOR	1932.50
2	FIRST FLOOR	1874.21
3	SECOND FLOOR	1874.21
4	THIRD FLOOR	1874.21
5	FOURTH FLOOR	1874.21
6	FIFTH FLOOR	1874.21
7	SIXTH FLOOR	1874.21
8	SEVENTH FLOOR	2018.00
9	EIGTH FLOOR	1874.21
10	NINTH FLOOR	1874.21
11	TENTH FLOOR	1874.21
12	TERRACE/ MUMTY FLOOR	272.25
	TOTAL	21090.64

MESS BLOCK			
		AS PER DESIGN	
S.NO		TOTAL BUILT-UP	
	FLOOR	AREA SQ.MT.	
1	GROUND FLOOR	1592.16	
2	FIRST FLOOR	618.14	
3	TERRACE/ MUMTY FLOOR	116.23	
	TOTAL	2326.53	



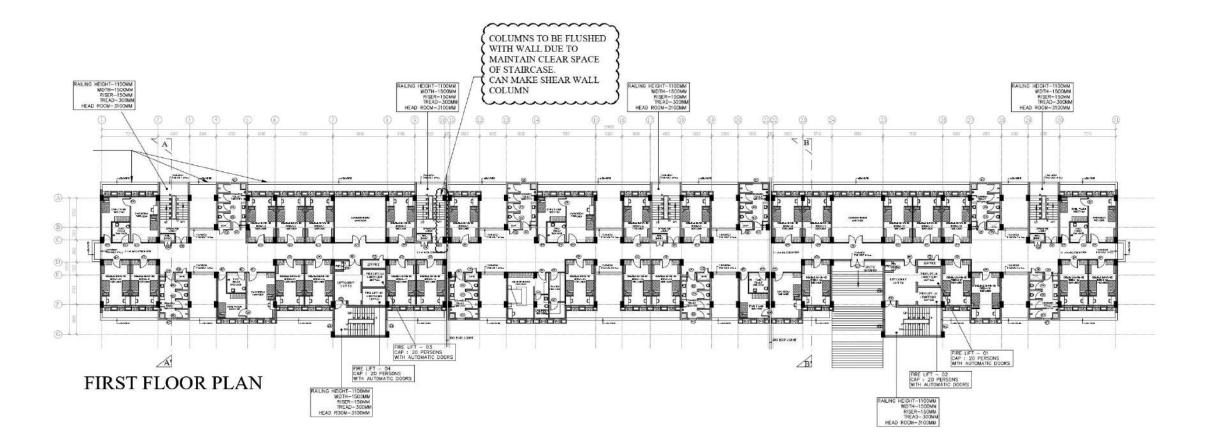
GROUND FLOOR

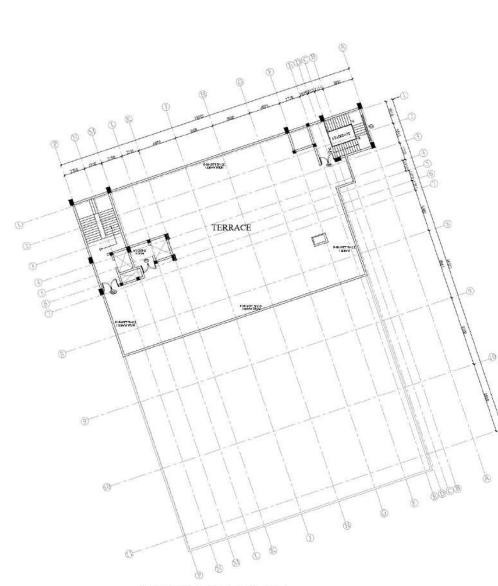




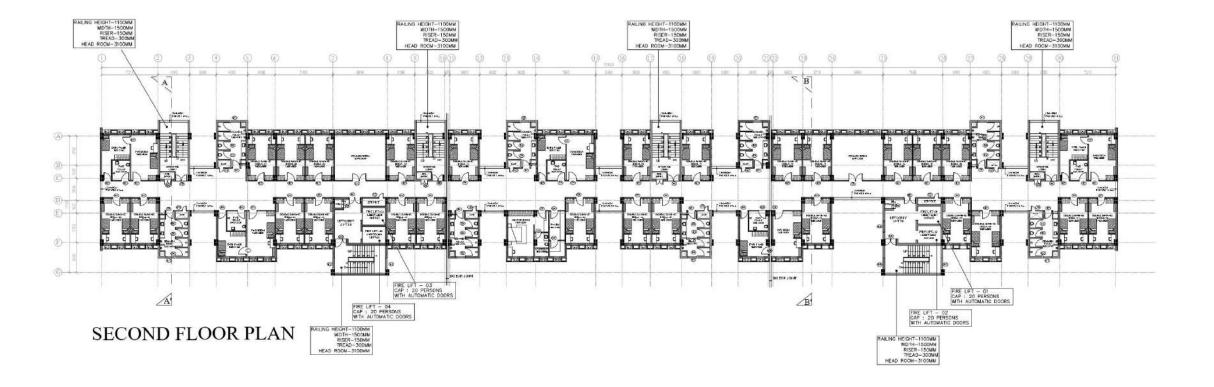
New Campus for Indian Institute of Management, Bangalore

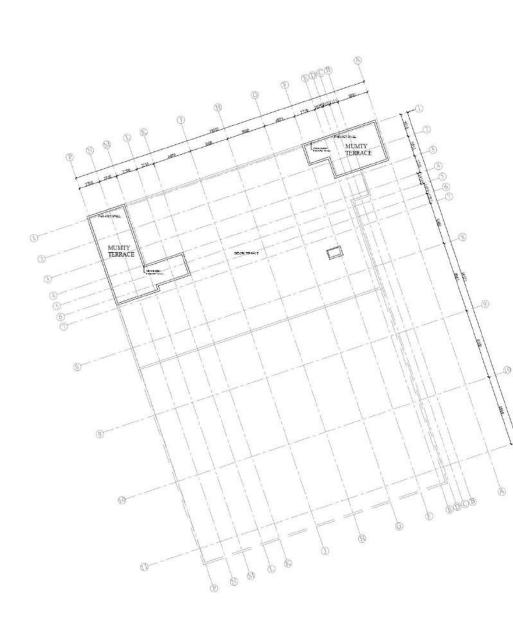
FIRST FLOOR



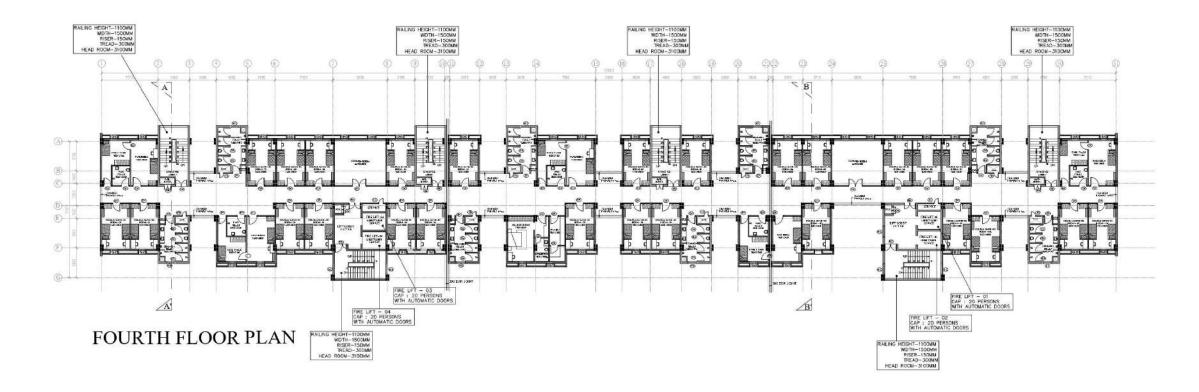


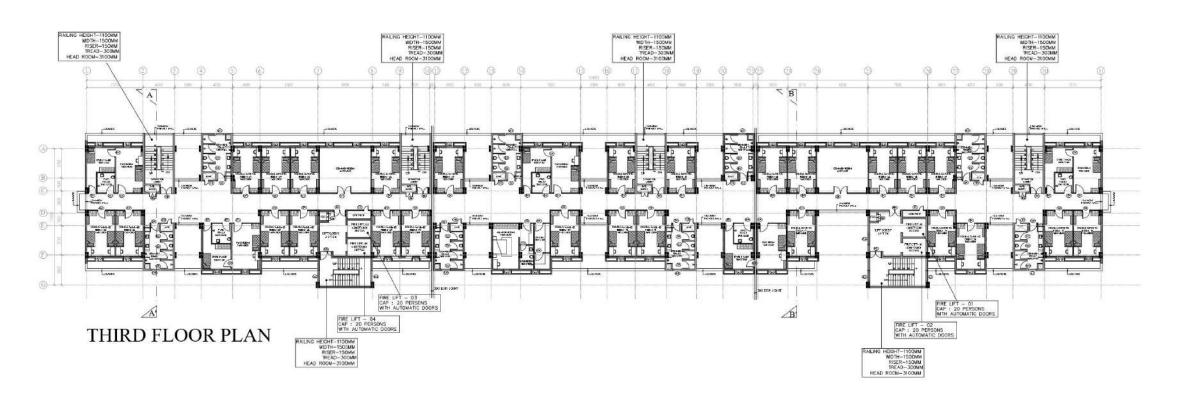
SECOND FLOOR

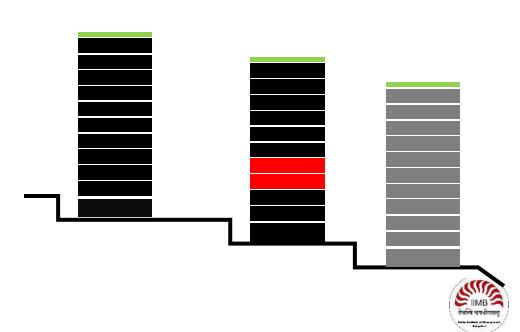




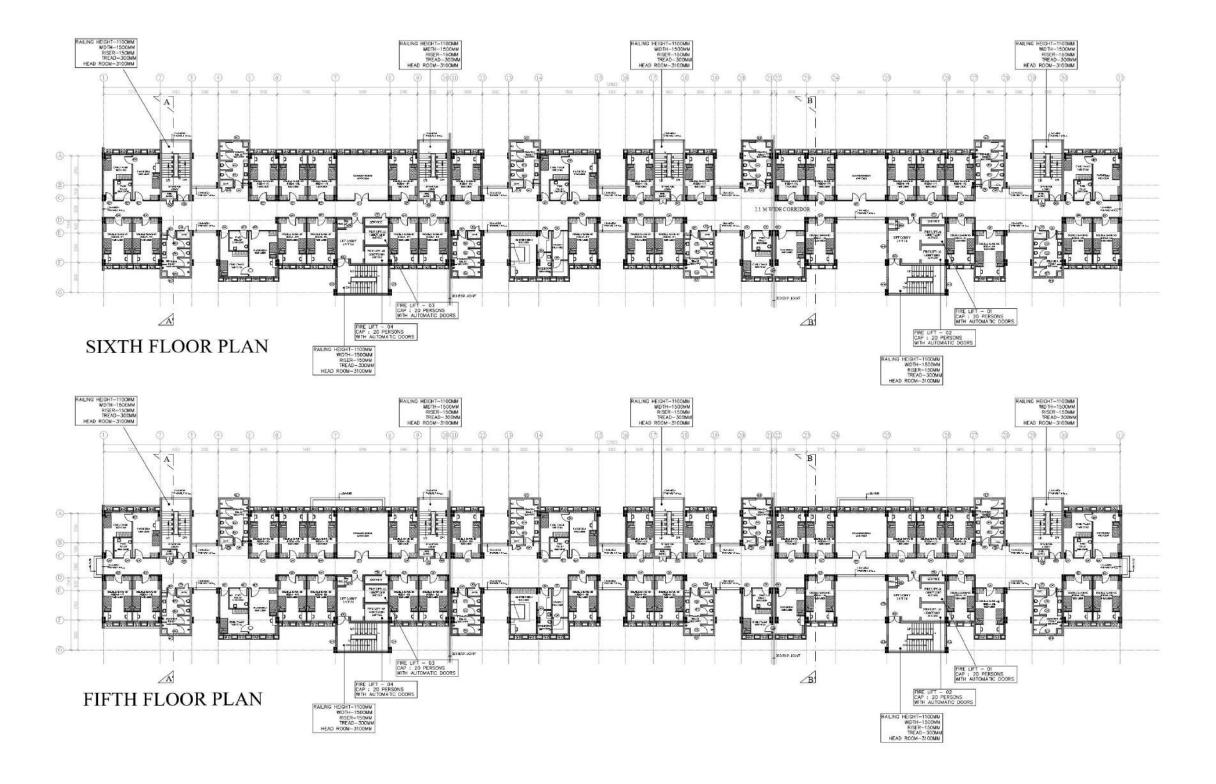
HOSTEL COMPLEX THIRD FLOOR & FOURTH FLOOR PLAN

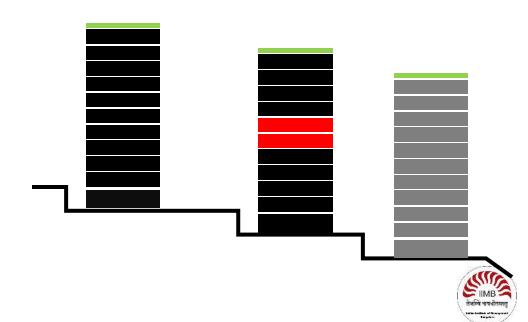




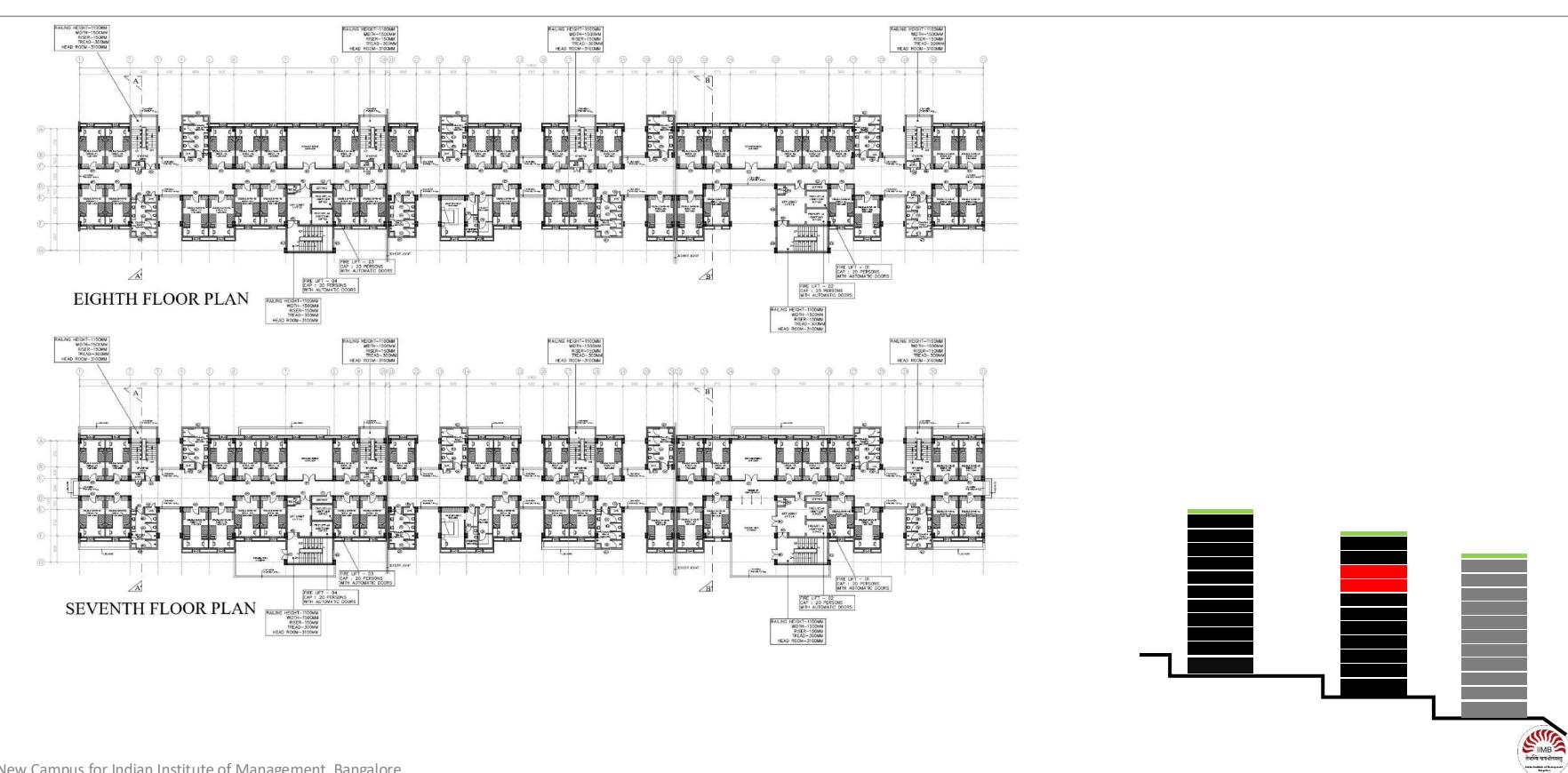


FIFTH FLOOR & SIXTH FLOOR PLAN

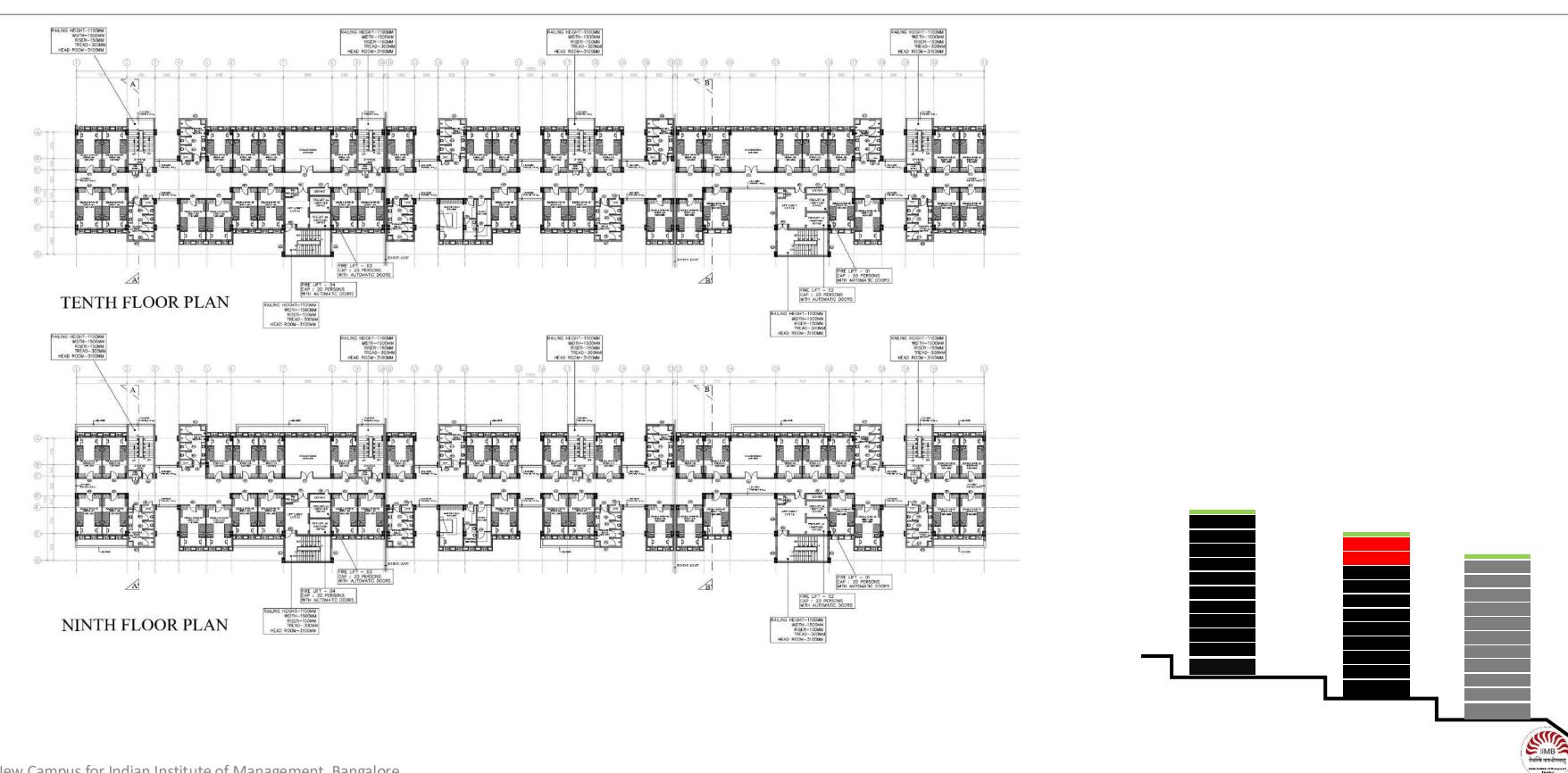




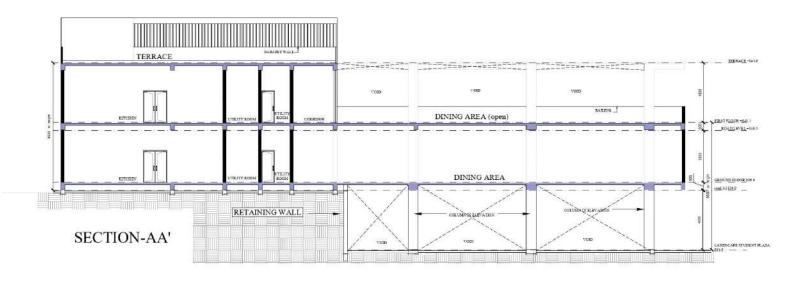
HOSTEL COMPLEX SEVENTH FLOOR & EIGTH FLOOR PLAN

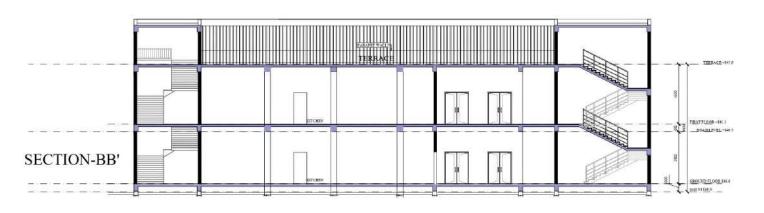


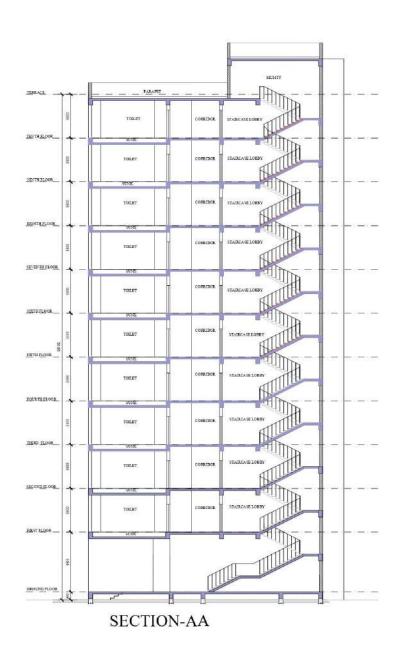
HOSTEL COMPLEX NINTH FLOOR & TENTH FLOOR PLAN

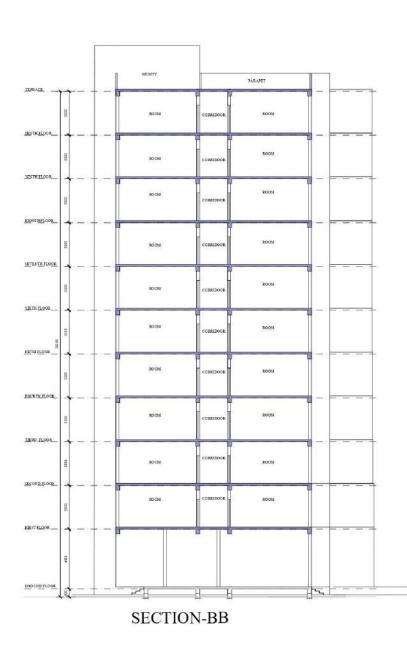


HOSTEL COMPLEX SECTIONS





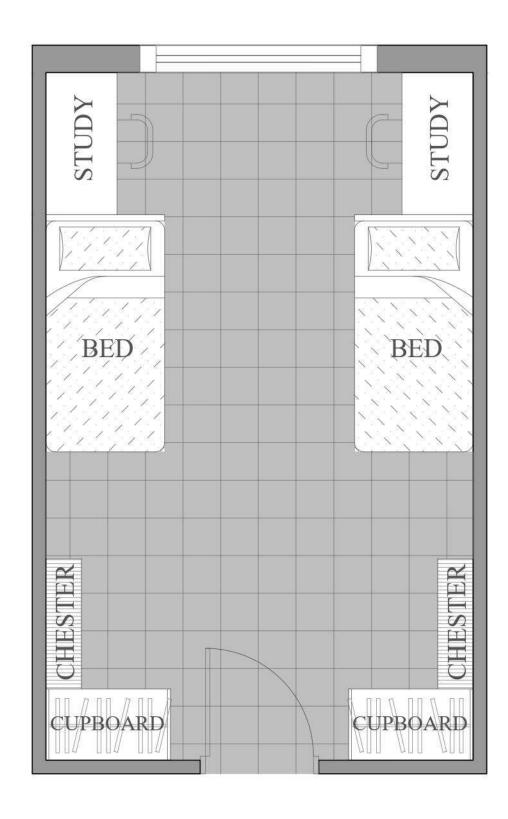


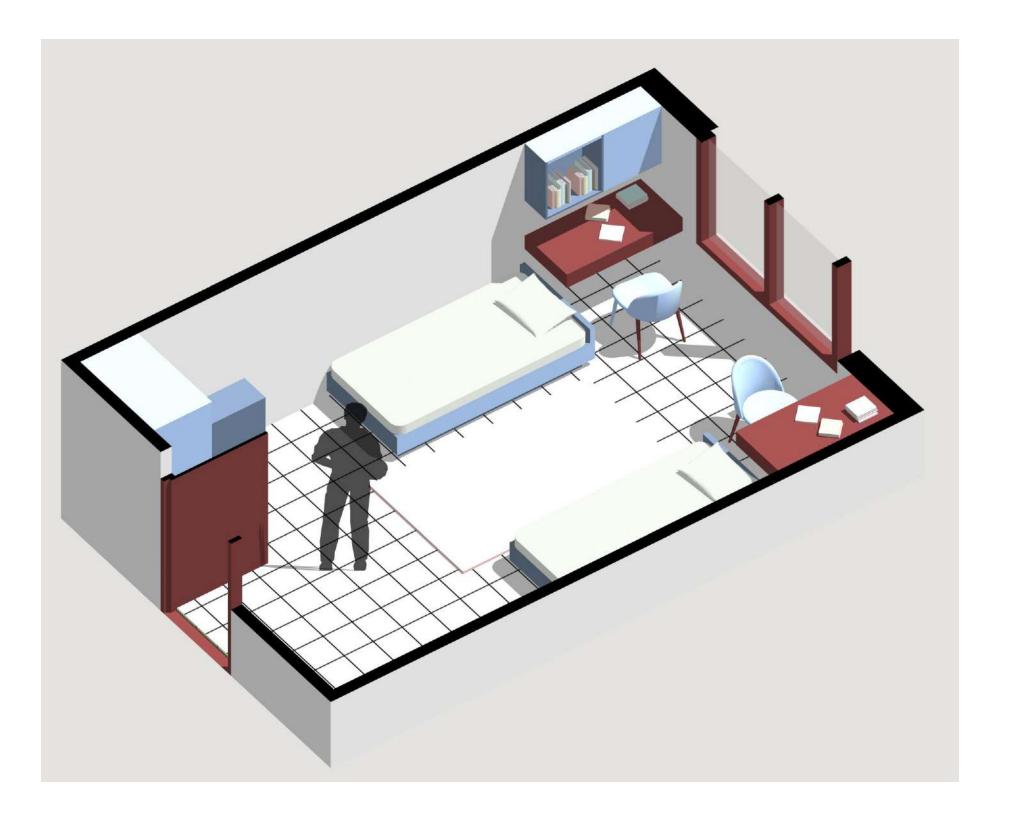


MESS BLOCK HOSTEL BLOCK



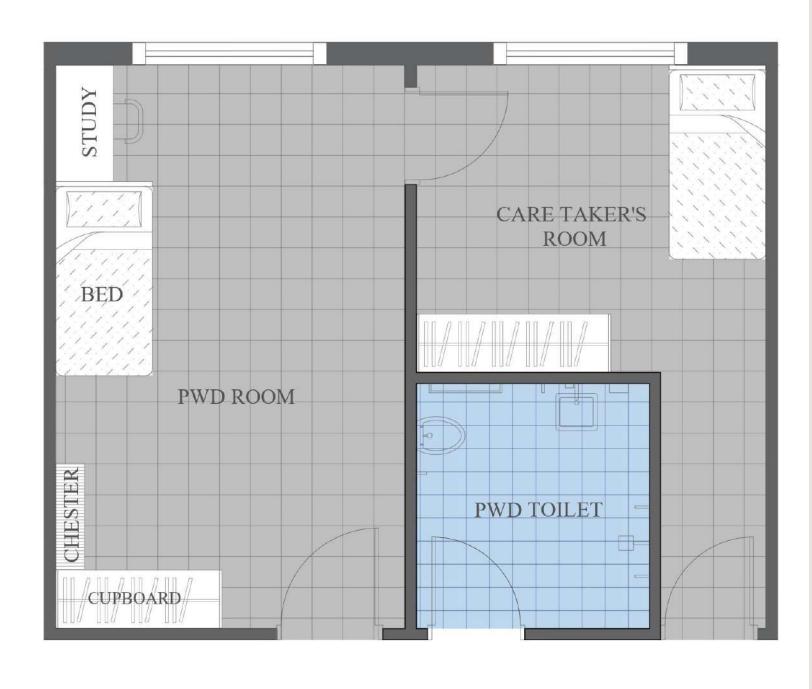
HOSTEL ROOM DOUBLE OCCUPANCY (3.6x5.8m)

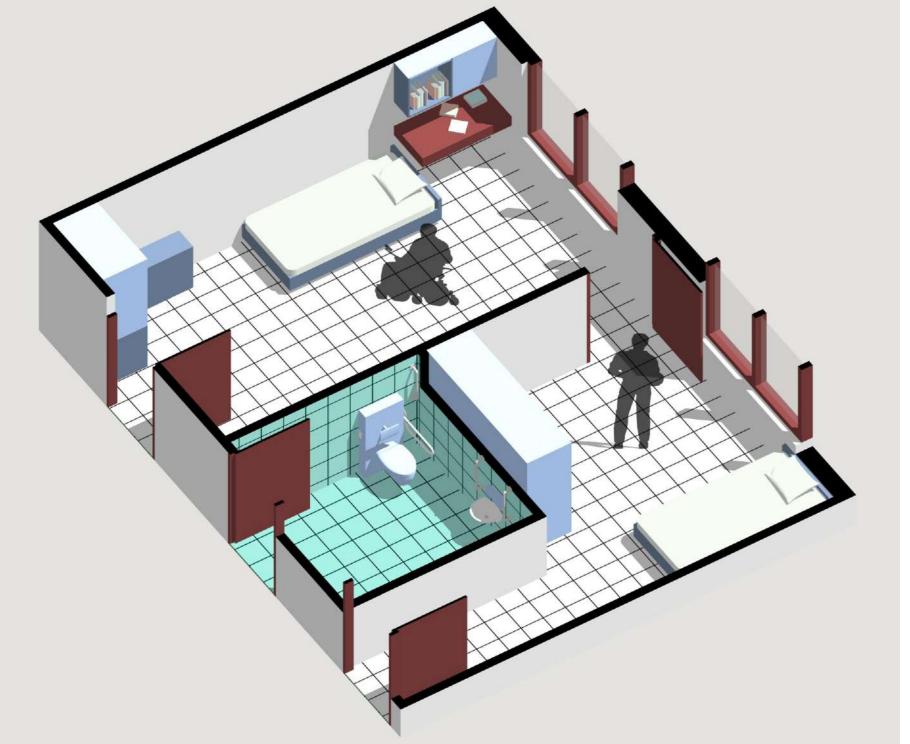






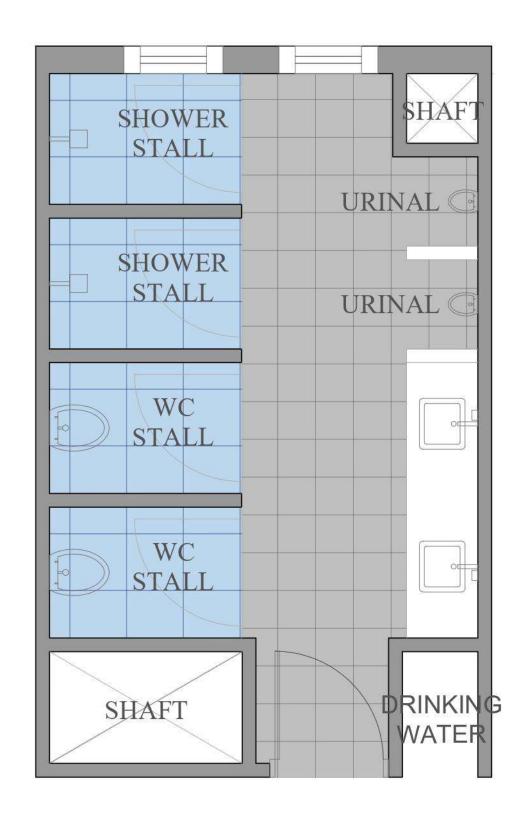
HOSTEL ROOM (PWD WITH CARETAKER) DOUBLE OCCUPANCY (7.2X5.8M)

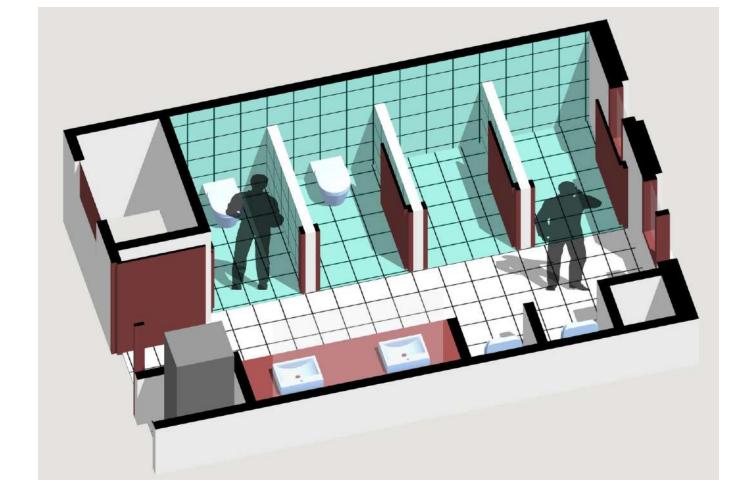






HOSTEL COMPLEX TOILET UNIT 3.6X 7.8 (RATIO 1:5)





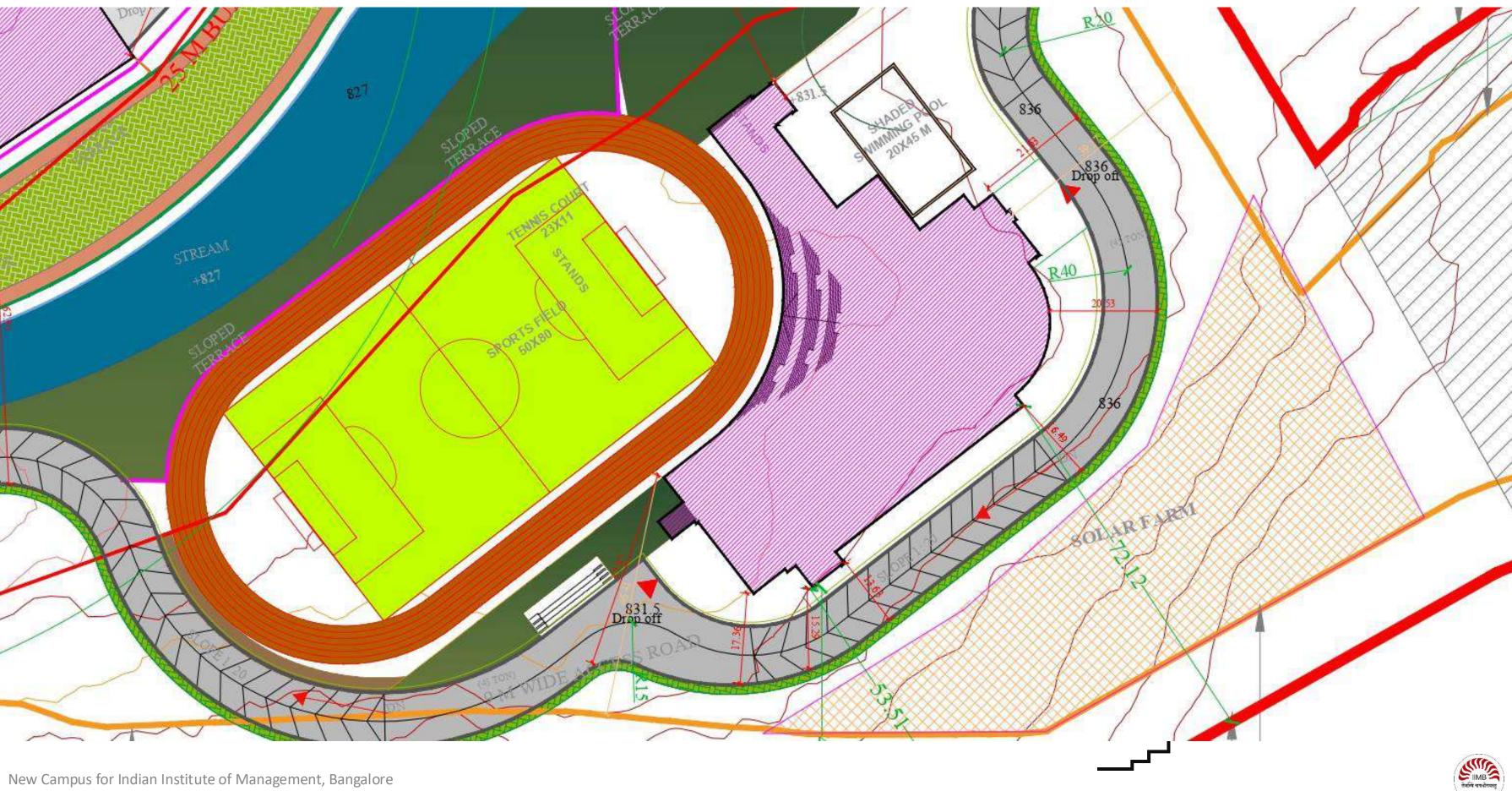








SITE PLAN

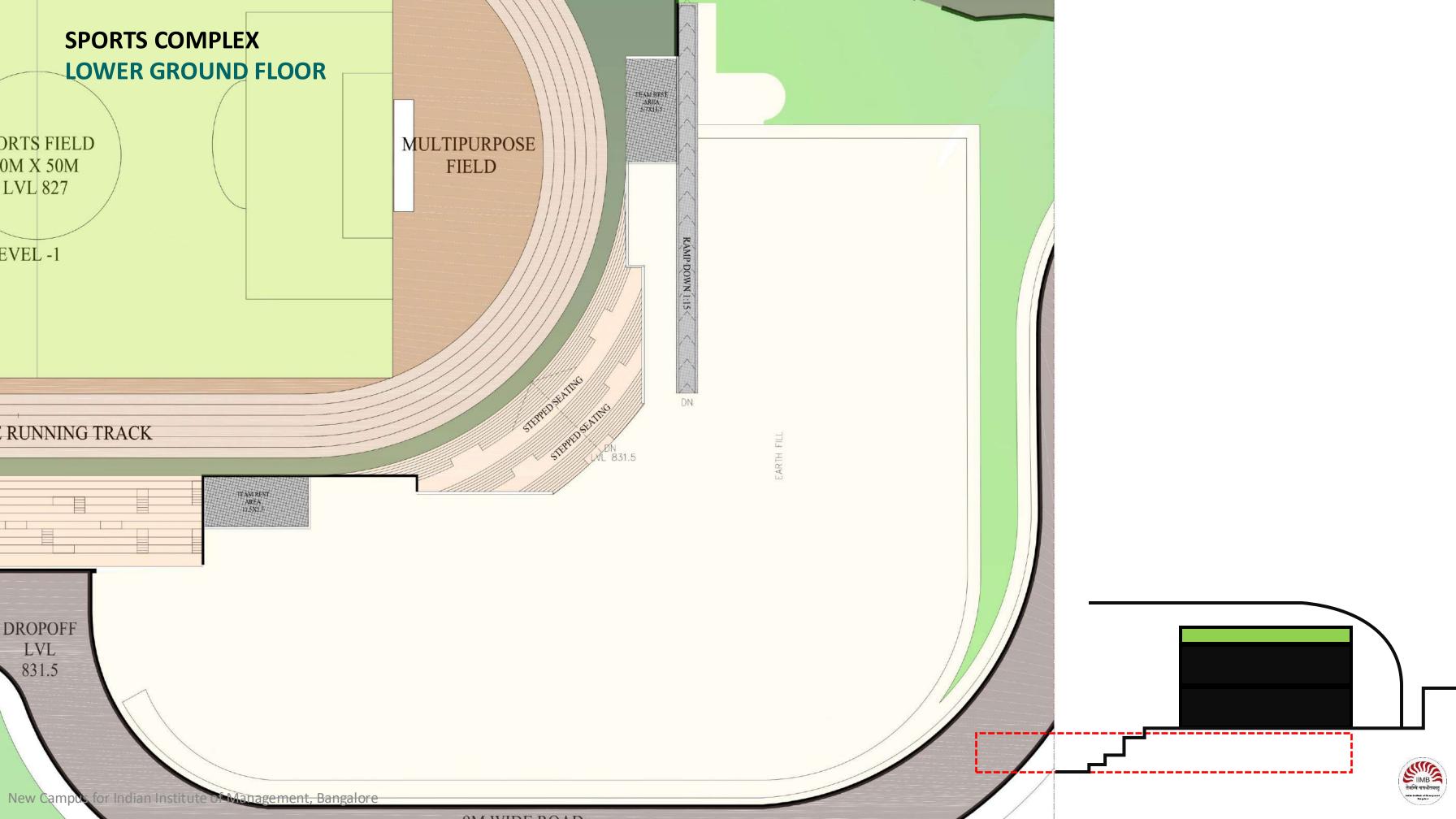


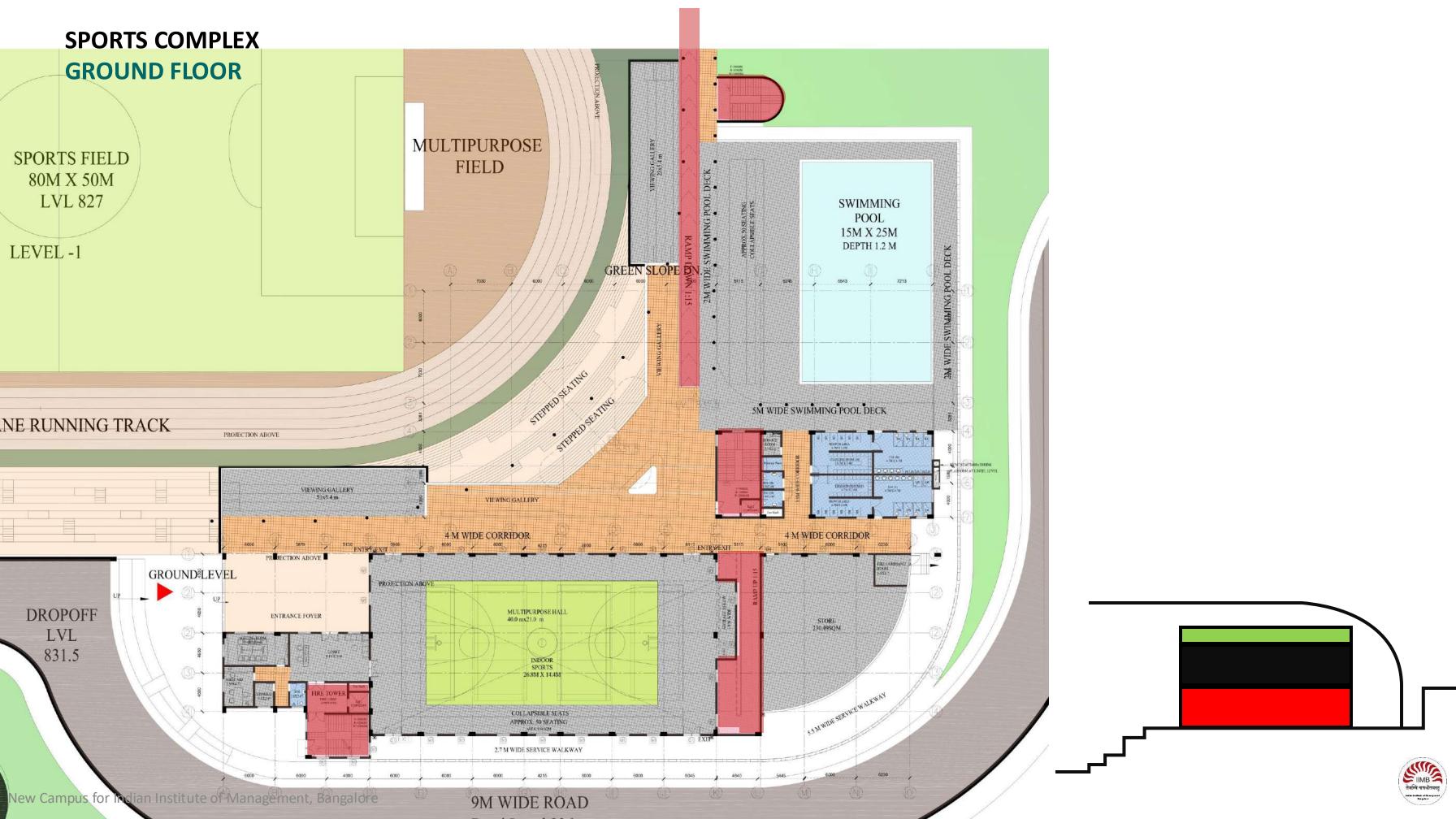
SPORTS COMPLEX

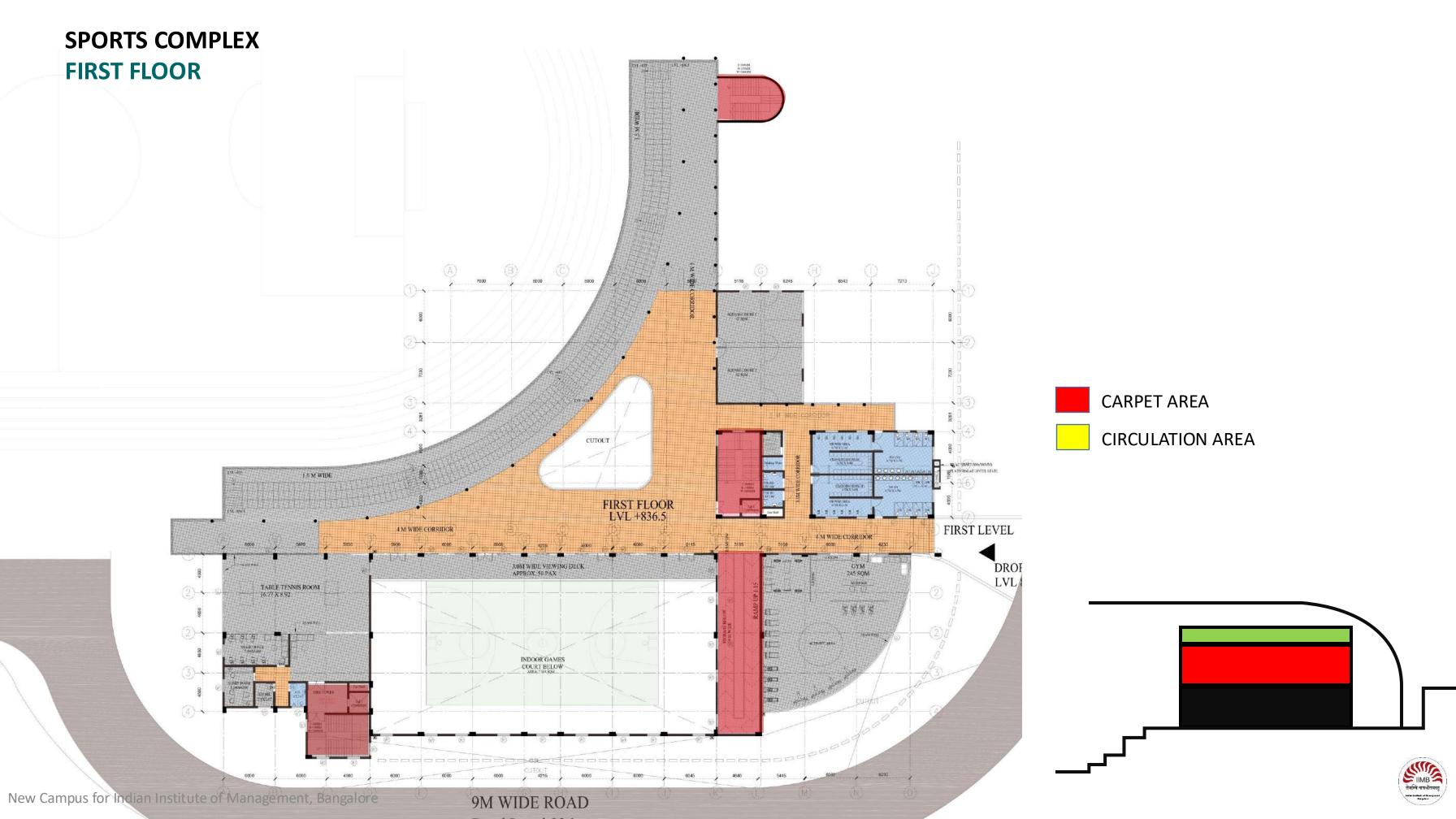
AREA SUMMARY AS PER DESIGN

	SPORTS COMPLEX				
		AS PER DESIGN			
S.NO		TOTAL BUILT-UP			
	FLOOR	AREA SQ.MT.			
1	LEVEL AT +827	132.00			
2	GROUND FLOOR	2946.00			
3	FIRST FLOOR 2711.0				
4	TERRACE/ MUMTY FLOOR	159.00			
	TOTAL	5948.00			

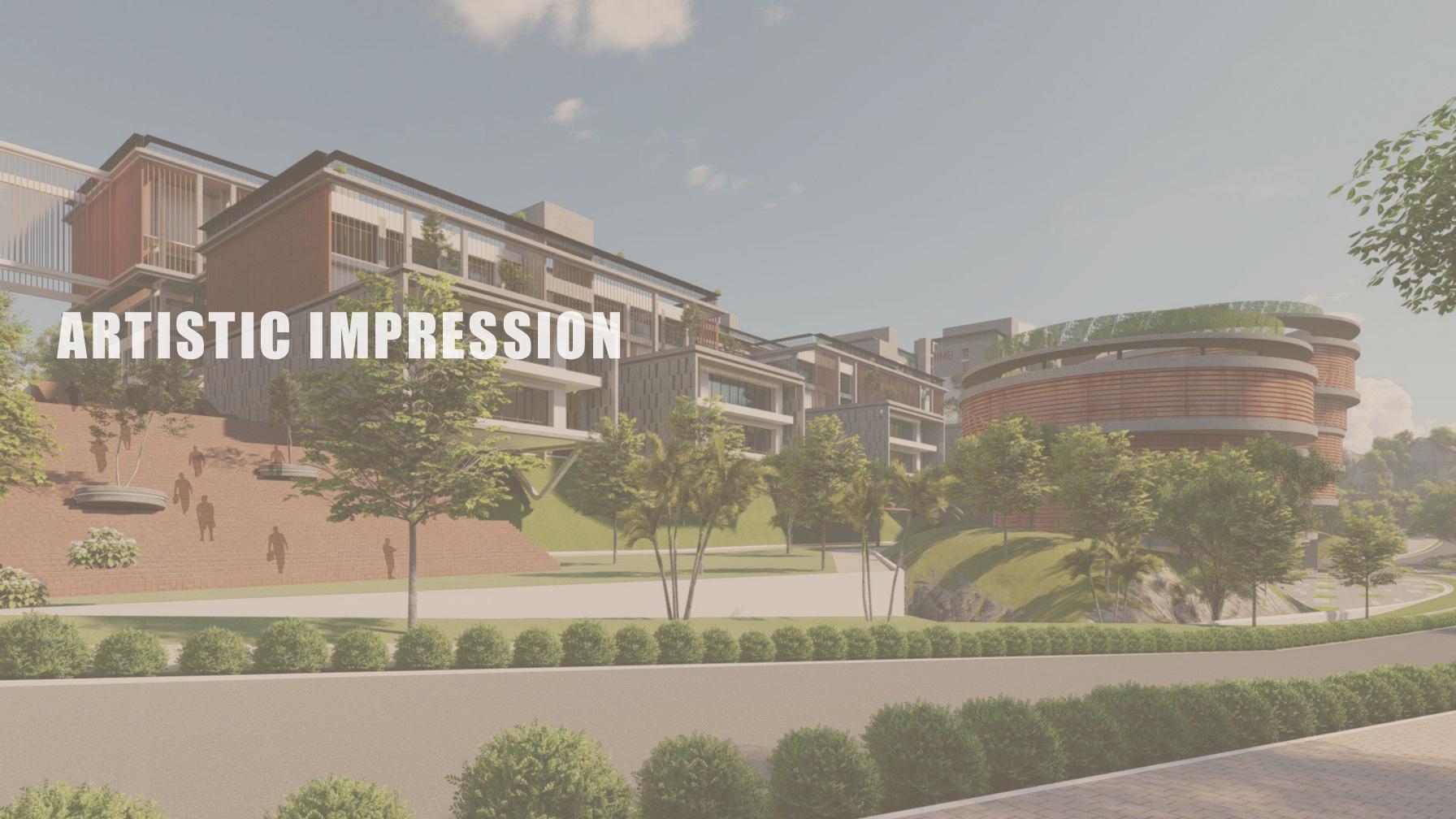


























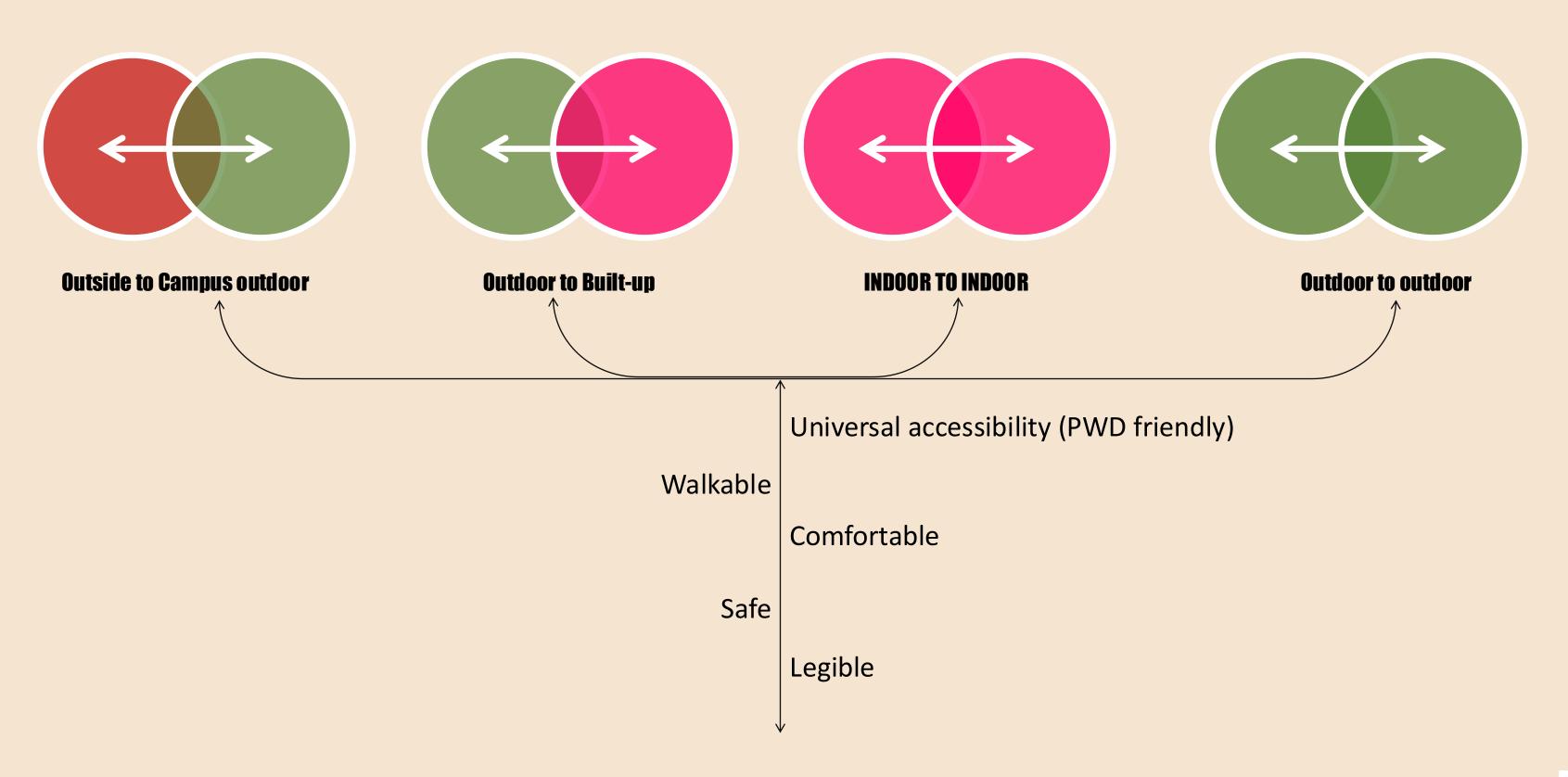














SUSTAINABILITY











REDUCE

PRODUCE

RECOVER





ACTIVE DESIGN
STRATEGIES

CLOSE THE LOOP

- Cut & Fill
- Built-up on ground
- Preserve existing ecology
- Green cover
- Biophilic experienceWater conservation
- Kitchen garden
- Leaves
- Topsoil nutrition



- Water demand
- Water pollution
- Water wastage

- Greywater recycling
- & distribution
- Stormwater detention
- Treatment Plants
- Rainwater reservoir
- Wetland
- Bioswales



- Resource demand
- Reduce heat gain
- Embodied energy
- Urban heat island effect

- Rooftop Solar PV
- Solar Farm
- Solar Hot Water
 - System

Kitchen gardensComposting



Negative social spaces

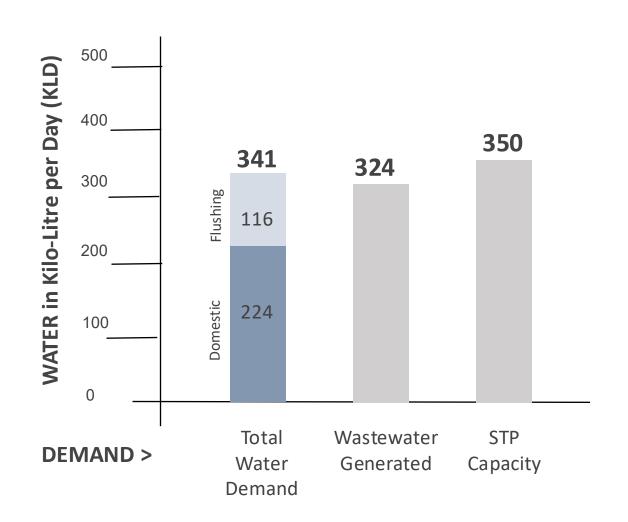
- Social cohesion
- Well-being
- Porosity
- Accessibility
- Positive Social Impact

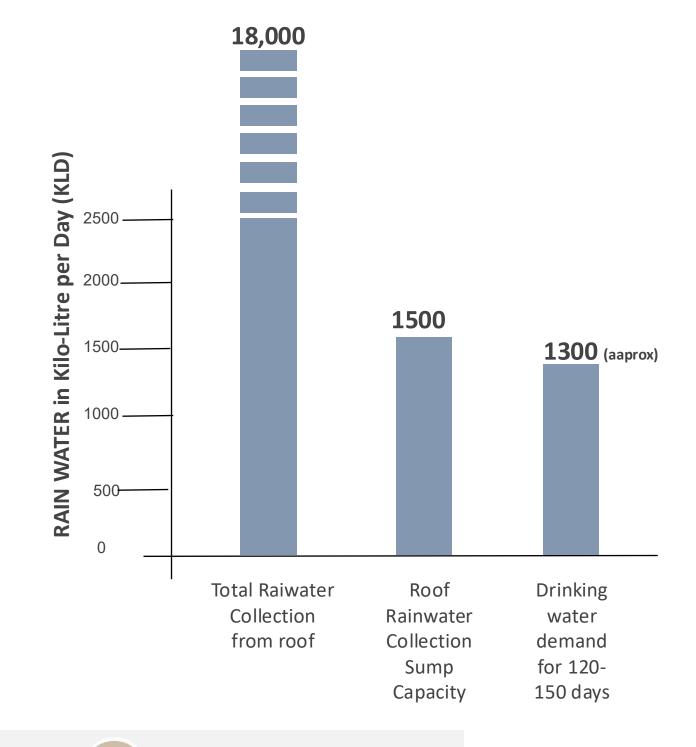


- Waste generation
- Awareness about recycling, upcycling & composting
- Kitchen gardens
- Composting











REDUCE

- Water demand
- Water pollution
- Water wastage



PRODUCE

- Greywater recycling & distribution
- Stormwater detention



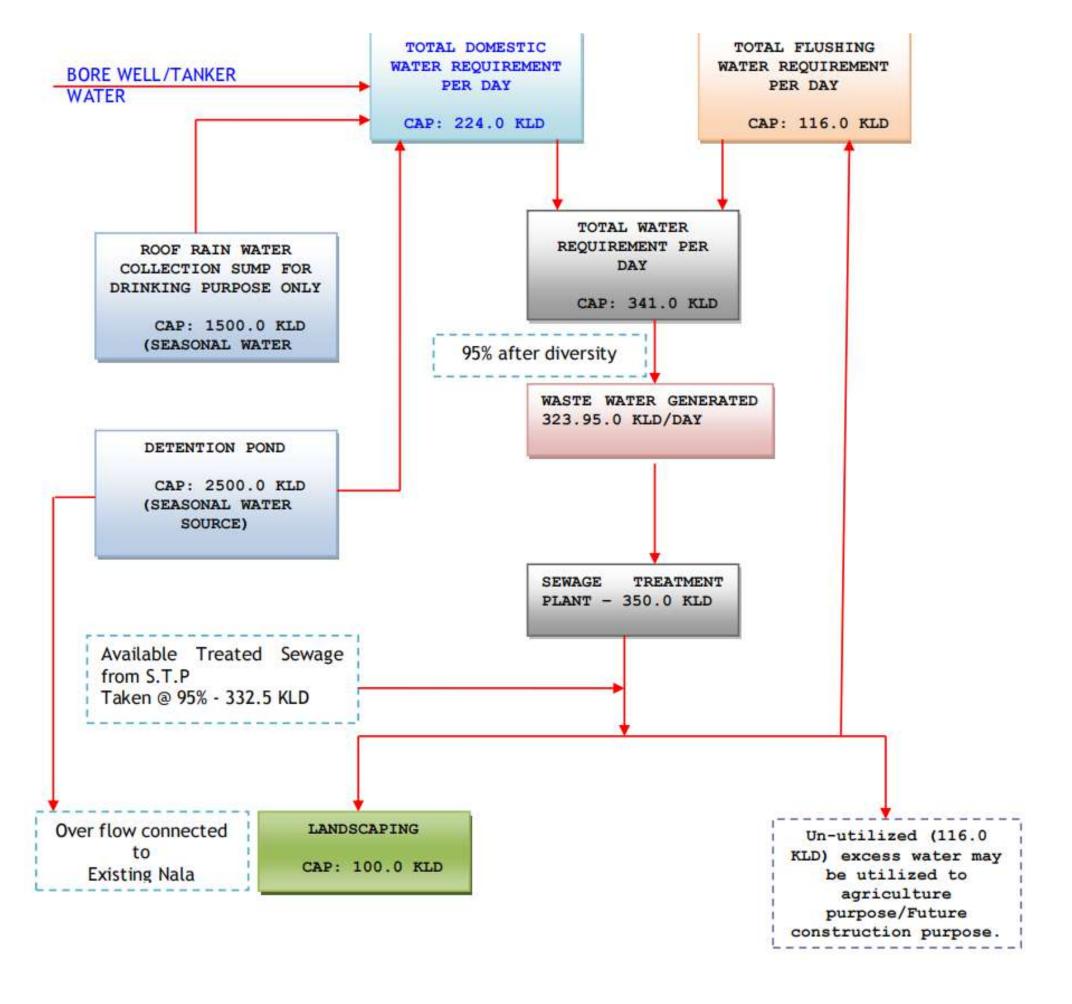
RECOVER

- Treatment Plants
- Rainwater reservoir
- Wetland
- Bioswales



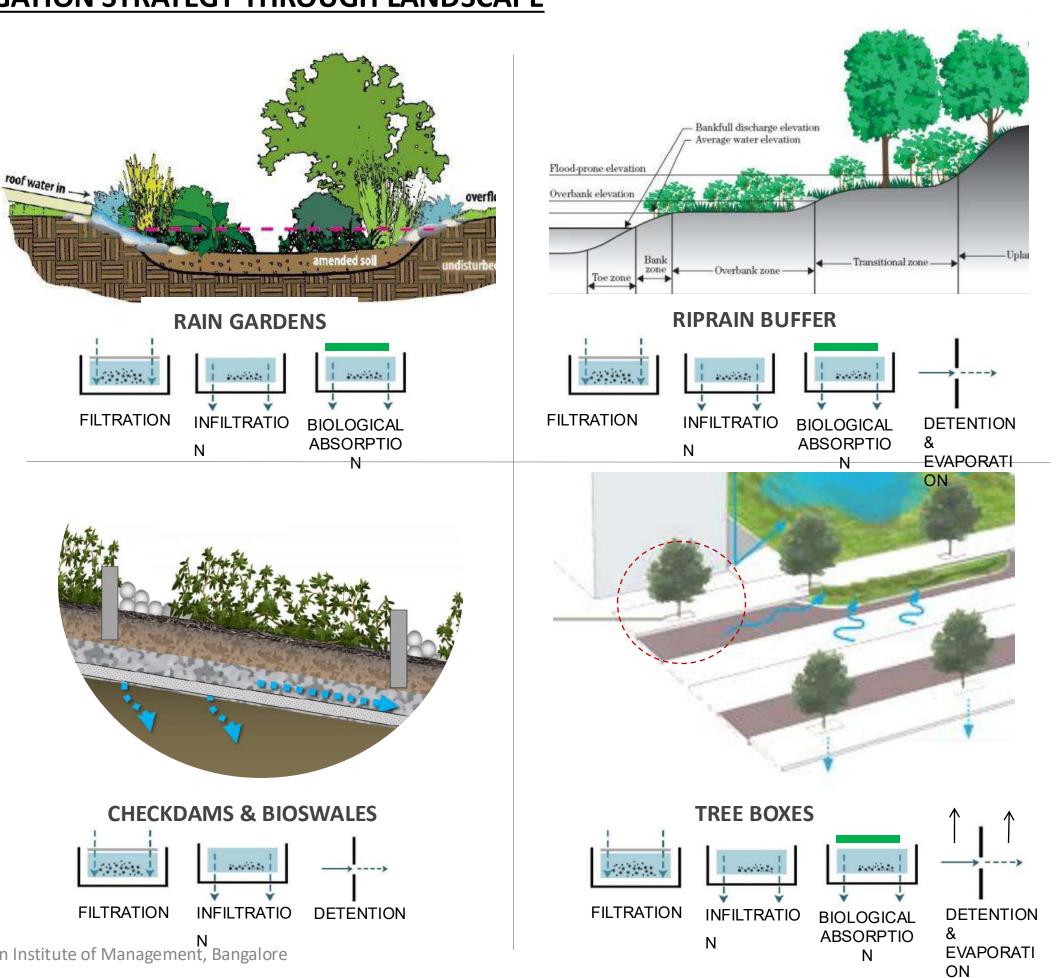


WATER BALANCE CHART

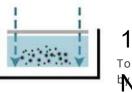




FLOOD MITIGATION STRATEGY THROUGH LANDSCAPE

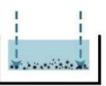


RAINWATER HARVESTING STRATEGY



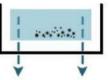
1.FILTRATIO

To separate sediments from water by nterposing a medium (filter)



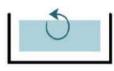
2.SEDIMENTATION

To Settle down entrained particles



3.INFILTRATIO

To allow water seep into the soil nd recharge aquifer



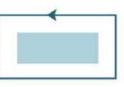
4.RECYCLE

To recycle nutrients, reuse cleaner water, etc.



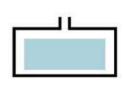
5.DETENTION

To reduce rainwater's peak flow



6.RETENTION

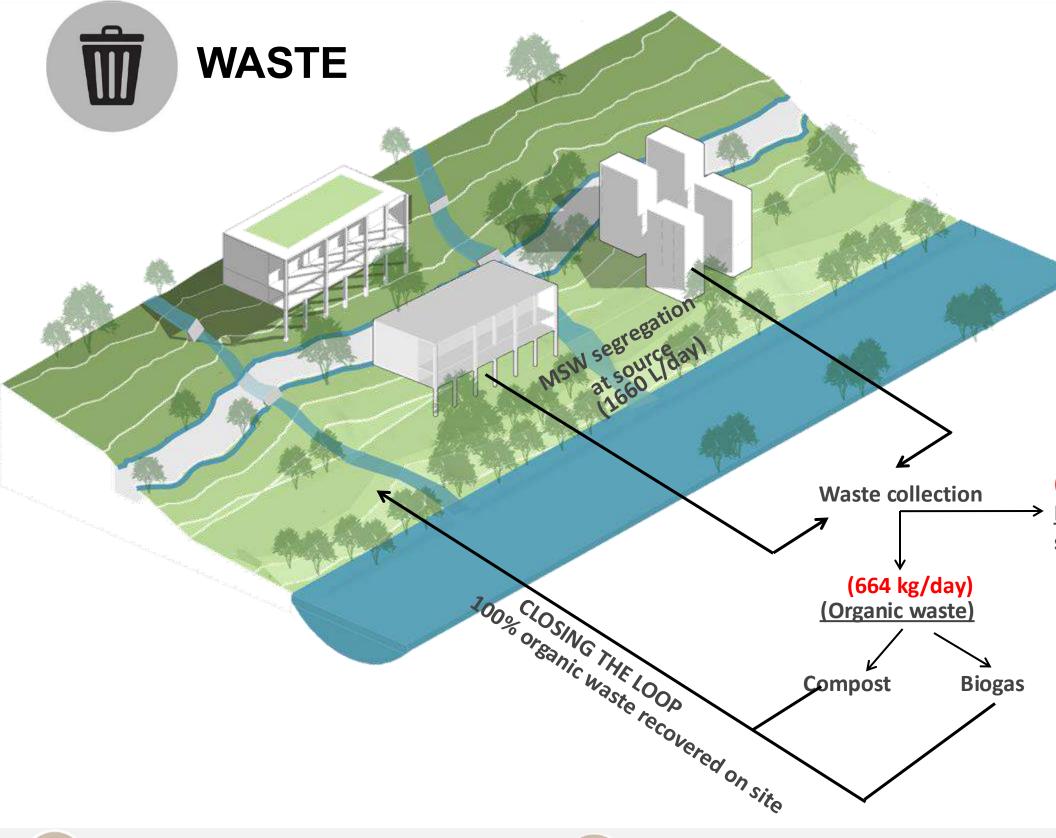
To keep water volume on place



7.STORAGE

To conserve clean water for reuse





SI No.	Description of Module	No. of persons	capita considered	Inorganic waste per capita considered (in kg/day)		Total Inorganic Solid Waste (in kg/day)
1	No of Teaching Faculty	300	0.08	0.12	24	36
2	No of Students	2000	0.24	0.36	480	720
3	No of Students For academic Block	400	0.08	0.12	32	48
4	Dinning/Canteen (Lunch hour)	400	0.24	0.36	96	144
5	Visitors	250	0.08	0.12	20	45
	Total	3350			664	996

(996 kg/day)

Inorganic Waste to Recyclers or upcycing on site or municipal landfill



REDUCE

 Waste generation & manhandling at source



PRODUCE

- Greywater recycling & distribution
- Stormwater detention



RECOVER

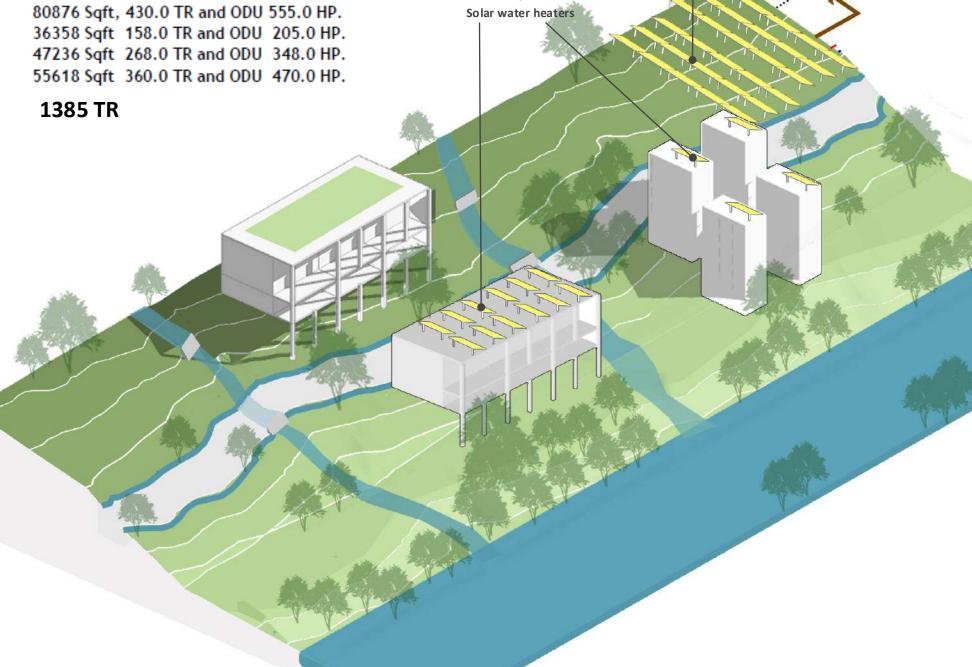
- Treatment Plants
- Rainwater reservoir
- Wetland
- Bioswales





• Total Air-Conditioning Load works out at:





Solar PV Farm

approx. 1 MW/day

ENERGY TO MICRO-GRID

SI No.	Building location	Phase 1 Built up	Phase2 Built up	Total area in sft	Phase 1 load in Kw		Phase 2 load in Kw		Total Load in kW
110.	Tocación	area in sft	area in sft		Lighting	RP Load	Lighting	RP Load	
					0.6W/sft	0.2w/sft	0.6W/sft	0.2w/sft	
1	MB1 block	132748	129507	262256	80	27	78	26	210
2	MB 2 block	38155	0	38155	23	8	0	0	31
	Class								
3	rooms	93289	74567	167856	56	19	45	15	134
	Library & Research								
4	block	35508	0	35508	21	7	0	0	28
	Hostel -								
	1(Double	222775	220404	442054	200		400		F20
5	Occupancy)	333775	329181	662956	200	67	198	66	530
		22/04	0	22/04	20	7	0	0	24
6	Mess	32684	U	32684	20	/	U	U	26
	Sports								
7	complex	54069	0	54069	32	11	0	0	43
	Gate								
ا ۾ ا	Complex &	4025	4.1540	40505	_		20	42	
8	Auditorium	4035	64560	68595	2	1	39	13	55
9	A	2/245	2/245	72630	22	7	22	7	58
9	Amentites	36315	36315	72630	ZZ	/	ZZ	/	38
\vdash	Service								
10	blocks ESS	19368	19368	38736		4	12		
	& STP				12			4	
11	HVAC Load								1000
12	PHE Load								300
	Total	779946	653498	14,33,443.97	468	156	392	131	2416
	Total								
	Connected Load in kW				61	24	52	23	2416
	20dd 111 N 11					2410			



GRIHA COMPLIANCE

Green/ High Performance Design



ACTIVE SYSTEMS

Technology + Efficiency

- Energy efficient lighting
- Energy efficient air conditioning
- Energy efficient fans & ventilation systems
- High performance façade with shading and insulation
- Integrated building management systemDesktop ventilation nozzles at
- Energy efficient plug loads (computers, copiers, lights)
- Heat recovery systems
- Photovoltaic panels



Sustainable Design



PASSIVE SYSTEMS

Technique + Technology + Efficiency

- Extensive reliance on daylighting
- Increased reliance on natural ventilation
- Rooftop and façade greening
- Light directing devices
- Ventilation enhancing devices

SECTIONS	POINTS	%ILE	
1. Site Planning	12 / 13	92.3%	
2. Construction Management	4/4	100%	
3. Energy Optimization	14 / 18	77.7%%	
4. Occupant Comfort	12 / 12	100%	
5. Water Management	16 / 16	100%	
6. Solid Waste Management	6 / 6	100%	
7. Sustainable Building Management	11 / 11	100%	
8. Life Cycle Costing	3 / 5	60%	
9. Socio-Economic Strategies	8 / 8	100%	
10. Performance Metering & Monitoring	7/7	100%	
11. Innovation	5 / 5	100%	
TOTAL	93/100	93%	



The following calculations are based on the GRIHA 2019 feasibility checklist, and as per GRIHA guidelines & benchmarks, which have been incorporated in the masterplan of IIMB.

PERCENTILE	Achievable Stars
THRESHOLD	as/GRIHA 2019
25-40	*
41-55	**
56-70	***
71-85	***
86 and more	****



LANDSCAPE



INTENT

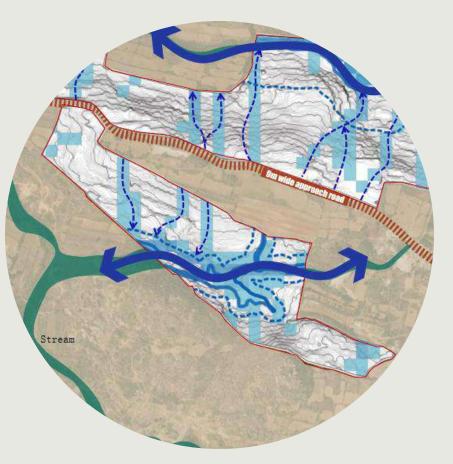
To enable <u>utilitarian exchange</u> within identified <u>networks</u> through <u>Biophilic Design</u>.



DERIVING FROM EXISTING



Eco-sensitive zone



Natural water & green networks on site



Steep slopes on site



Green legacy of existing IIM campus



NETWORKS







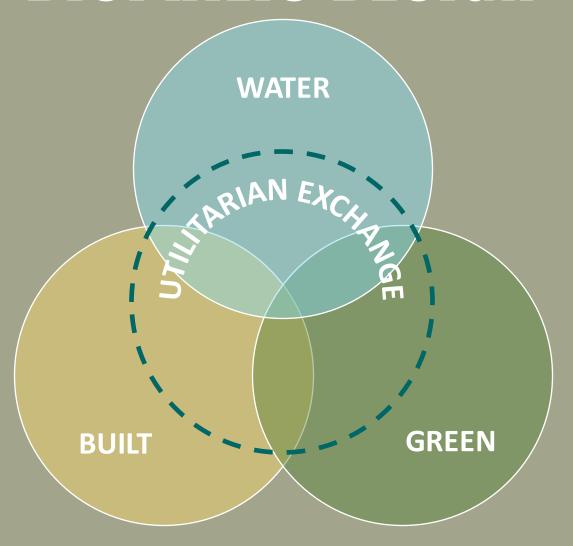
WATER



BUILT-UP

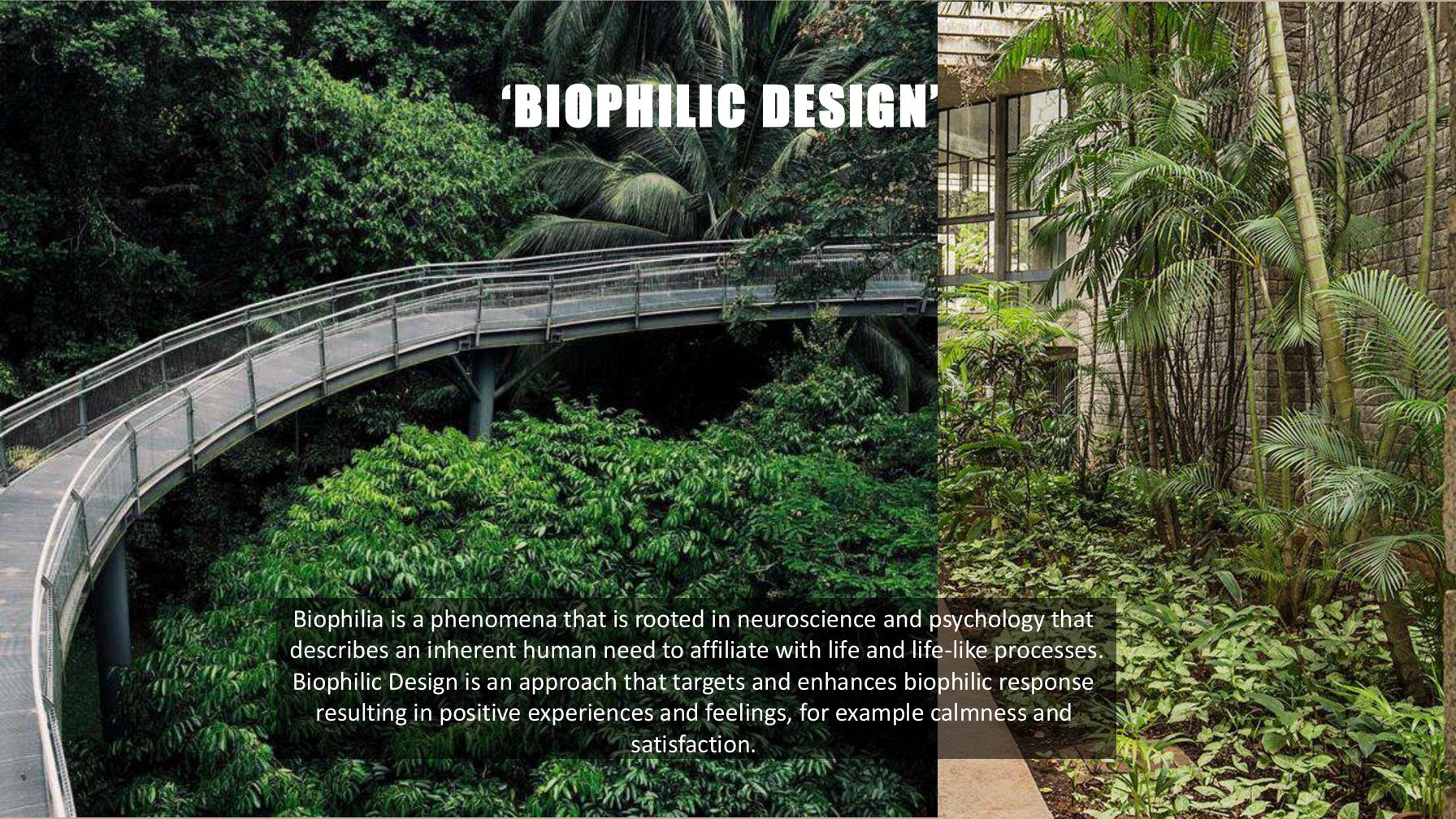


'BIOPHILIC DESIGN'



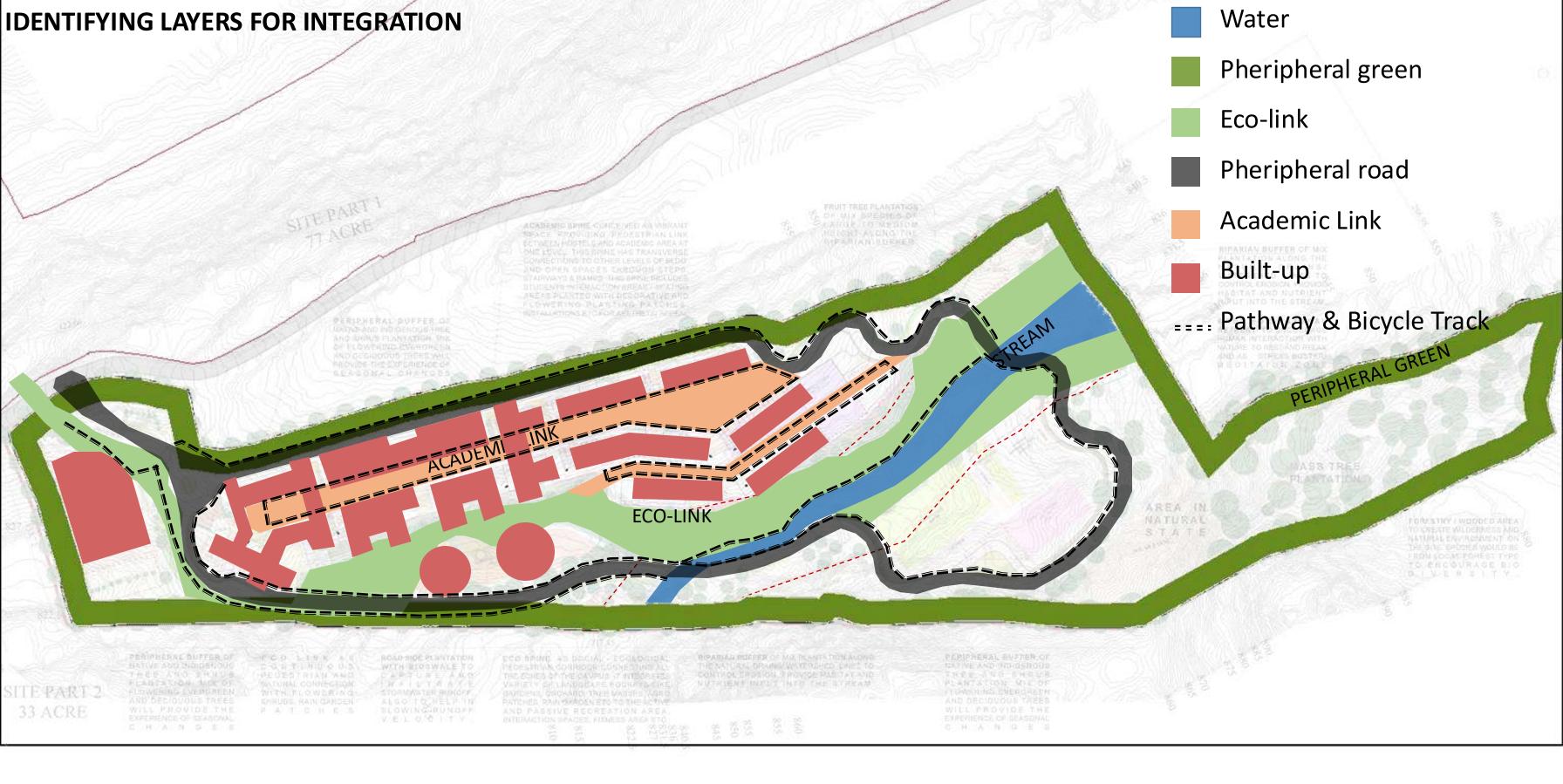
Envisioning a campus that invests in Natural Capital and thereby offers gain in Social Capital, Symbolic Capital, Built Capital through 'integration' of three networks on site.





IMPLEMENTATION













STREAM EDGES WITH RIPARIAN BED, FRUIT TREE **PLANTATION AND STUDENT AREAS**

Riparian buffer of mix plantation along the natural drains/ watershed lines/stream to control erosion, increase nutrient input into the stream and provide habitat to the fauna.

Fruit tree plantation of mix species of large to medium height along the riparian buffer is proposed to encourage fauna for biodiversity.

SITE PART

Wetland Habitat

FAUNA SPOTTED VERY FREQUENTLY (OVER 100 TIMES A YEAR) NEAR

WATER EDGES IN ANAKEL RANGES

FAUNA SPOTTED VERY FREQUENTLY (OVER 200 TIMES A YEAR) IN WOODY AREAS IN ANAKEL RANGES

PLANTATION ALONG THE

Streak Throated Swallow

Bluethroat

Red-rumped swallow

Grey Headed Swamphen

SITE PART 2

33 ACRE

PERIPHERAL BUFFER OF

STREAM & BUFFER

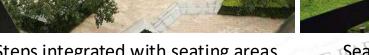


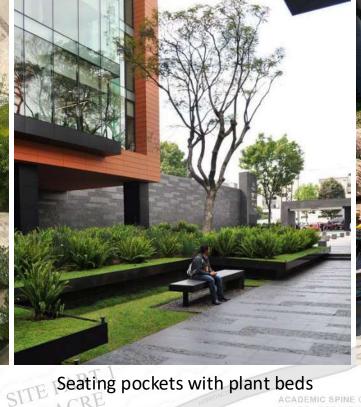




















Steps integrated with seating areas

ACADEMIC LINK

Conceived as vibrant space providing pedestrian link between hostels and academic area at one level, this spine has transverse connections to other levels of bldg. And open spaces through steps, stairways & ramps. This spine includes students interaction areas / seating areas planted with decorative and flowering planting patches, installations etc for aesthetic appeal

Student's plaza with stepped seating

Active & Passive recreational spaces

RIPARIAN BUFFER OF MIX

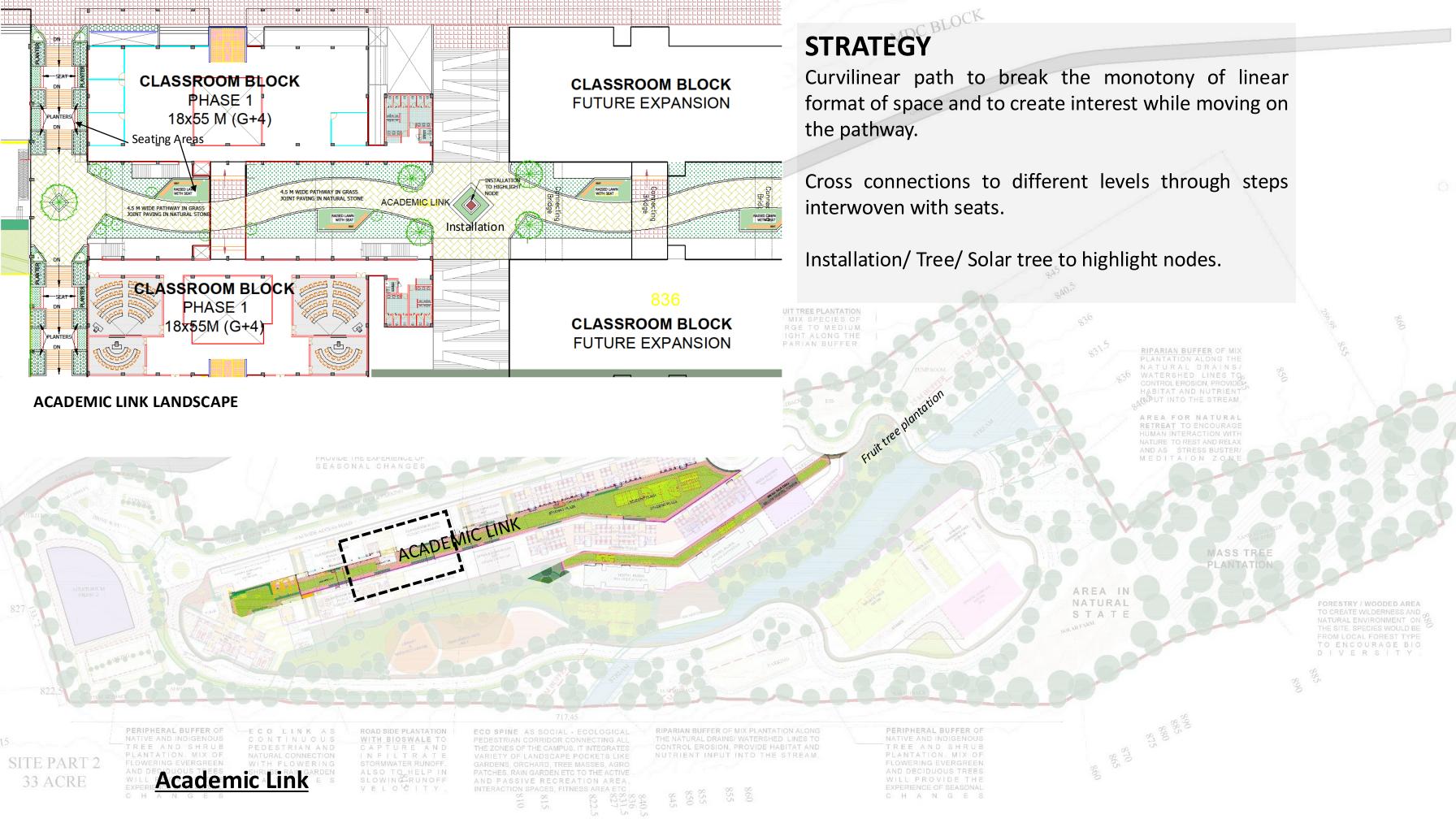
CONTROL EROSION, PROVIDE HABITAT AND

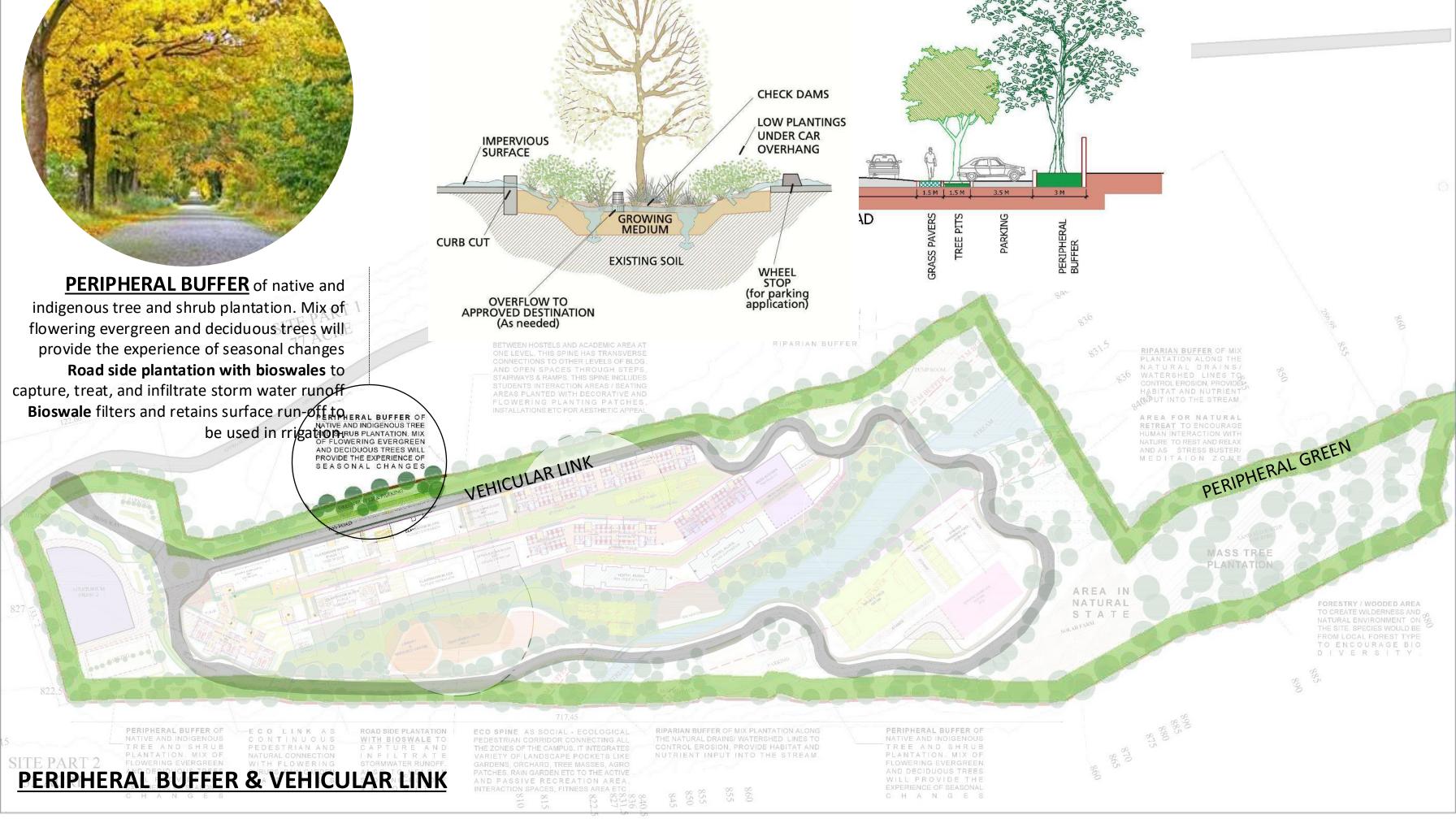
PERIPHERAL BUFFER OF PLANTATION, MIX OF WILL PROVIDE THE

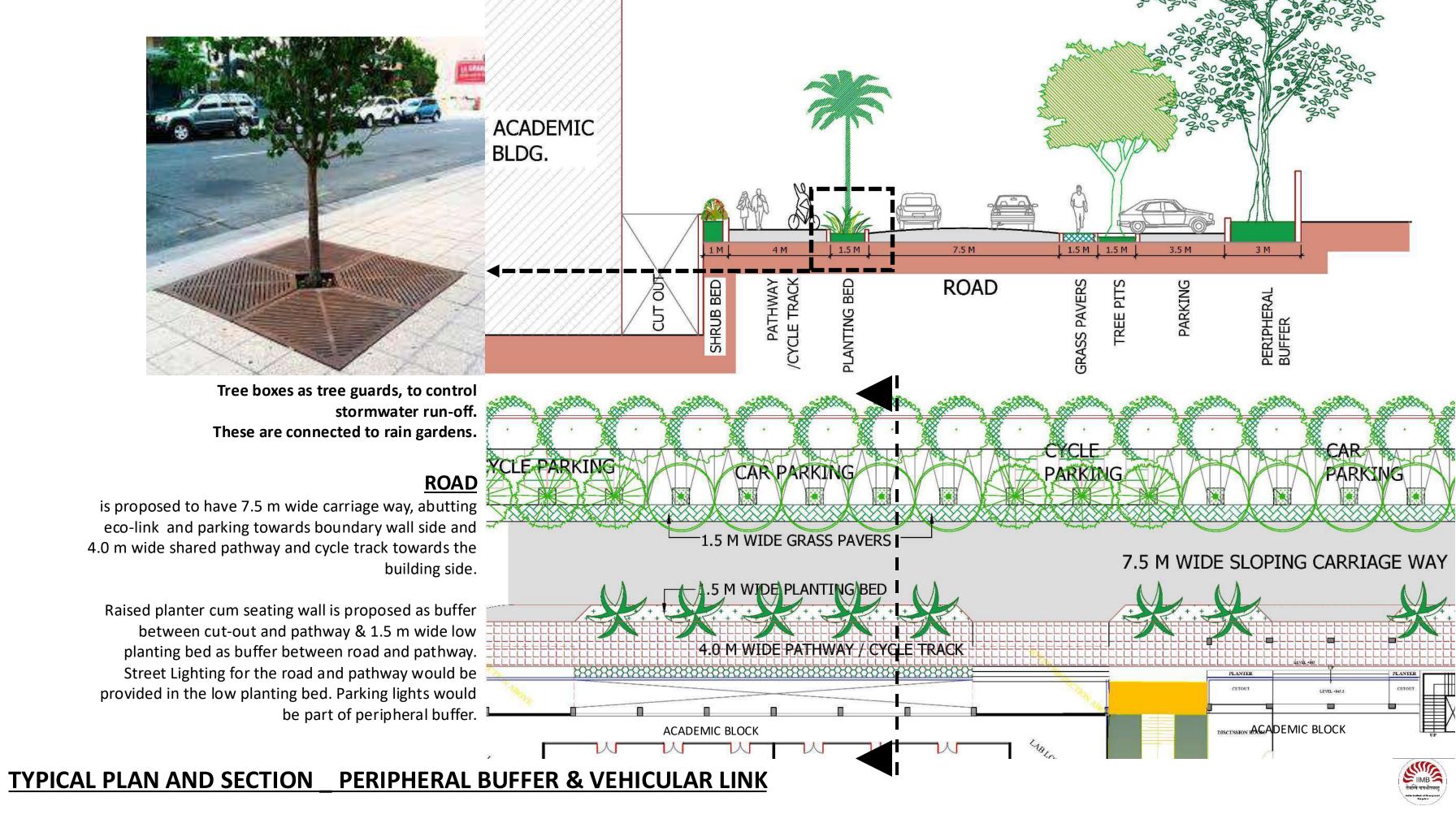
SITE PART 2 33 ACRE

PERIPHERAL BUFFER OF Academic Link

AND PASSIVE RECREATION AREA









<u>PARKINGS</u> are provided along the road and nodal parking at various locations.

All the parkings are proposed to have pervious surface like grass pavers to maximise rain water percolations.

Parking areas to be shaded and camouflaged by evergreen trees.





ENTRY NODE being the focal point at the entry of the buildings, it is proposed to have a sculpture or Installation along with manicured landscape of plant compositions.

ENTRANCE GATE COMPLEX comprises of planting island to segregate entry and exit, and Gateway building to house security & servillience.



REFERENCES



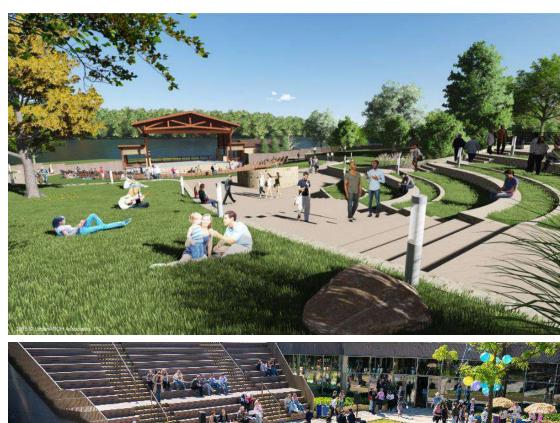




Close integration of Green and Blue networks along **STREAM/ WATERSHEDS** to promote resiliency as well as to strengthen the existing ecosystem on site.



Integration of public space and green along **ACADEMIC LINK**





Cross connections to different levels through steps interwoven with seats along **ACADEMIC LINK**



