

studio **ARCHNOVATE** INNOVATION IN ARCHITECTURE

studio
ARCHNOVATE
INNOVATION IN ARCHITECTURE

209, Regency Enclave, 4 Magrath Road
Bengaluru 560 025 India
+91 80 4853 0590 www.archnovate.in

Date: 24 July 2024
Doc. No.:SA-HR-2025-02

Internship Completion Certificate

This is to confirm that **Mr. Varun A. Sridhar** of **Fourth Year Bachelor of Architecture** studying in **School of Planning and Architecture, Bhopal** has completed his architectural internship program at **studio Archnovate** as per the details below –

Start date 16 January 2024
End date 18 July 2024

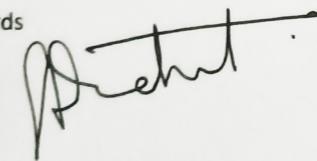
studio Archnovate is a design practice that endeavors to excel in the fields of Architecture, Interiors & Master planning. The practice specializes in projects for Science and Technology, apart from industrial projects and residences.

During that period, **Varun** has worked on laboratory buildings, industrial buildings, and office interiors. He has complemented the design team in drawings and 3D renderings. He attempts to resolve design issues and completes the deliverables in time. He has been a good support on presentations too.

Special mention is due to his unnerving patience and resolve to find solutions and to set up a database for Revit and BIM within the office.

I wish him the best in his future endeavors.

Regards



SANJAY A PUROHIT

Principal Architect

CoA Registration: CA/96/20892

sanjay@archnovate.in



ABOUT THE FIRM

Studio Archnovate was founded in 2013 by Sanjay Purohit with a commitment to bringing design into the realms of science, technology, and industry in India. We believe that art, aesthetics, and architecture play a crucial role even in areas typically viewed as mechanical and purely functional. In the construction of such structures, the importance of human nature, needs, and desires is often overlooked. Our mission is to change this perspective.

Through our architecture, we aim to enhance the well-being and safety of workers, scientists, engineers, and other professionals in the science and technology industries. Our dedication to sustainable design and continuous innovation drives us to advance industrial architecture in India. Based in Bengaluru, our firm comprises a talented team of a dozen architects and engineers. Our diverse portfolio includes laboratory R&D facilities, office spaces, manufacturing plants, and more, reflecting our mission to create environments that are both functional and inspiring.

PRINCIPAL ARCHITECT & FOUNDER



Sanjay Purohit, the founder and principal architect of Studio Archnovate, brings over 26 years of extensive experience in designing large-scale facilities across various roles. He has a deep specialization in the design of buildings for science and technology, with a particular affinity for laboratory R&D facilities. Over his initial 15 years as an architect, Sanjay contributed to R&D lab projects for prominent companies such as AstraZeneca, GE, DuPont, Adama, Sabic, Syngenta, and HPCL. He began his career working on software parks for Infosys and TCS and has significant experience in industrial architecture, collaborating with multinational clients like Volkswagen, ABB, Bosch, Biocon, and Alexandria.

After many successful years at Venkataraman Associates, Sanjay sought new challenges and opportunities for growth, leading him to establish Studio Archnovate in 2013. This move was driven by his desire to explore new possibilities and learn the intricacies of running a business—an aspect often overlooked in architectural education and early career stages. Sanjay holds a Master's in Urban Planning from the School of Planning and Architecture, New Delhi, and a Bachelor's in Architecture from Visvesvaraya National Institute of Technology (NIT), Nagpur. Additionally, he serves on the advisory board of SEFA (Scientific Equipment and Furniture Association) and the ISO Technical Committee for laboratory standards.

ASSESSMENT AND EXPERIENCE AT THE OFFICE



My prior interest in science, technology, and industry has seamlessly aligned with my work at Studio Archnovate, making it an ideal match for my long-term career aspirations. The work environment is wonderful, characterized by a friendly and calm atmosphere where everyone knows one another and maintains good relationships. Throughout my internship, I have been involved in a variety of work, enhancing my understanding of this niche field. At the office, I have enjoyed significant autonomy, which has allowed me to experiment, learn, and share my knowledge with my colleagues.

The inspiring projects I have worked on have given me invaluable experience in the architecture of laboratories, R&D facilities, and factories—areas I am passionate about contributing to further in my architectural career. This exposure is perfect for my final year thesis, providing the foundational knowledge necessary to conduct research and test its outcomes in my thesis project. Studio Archnovate has been instrumental in nurturing my interests and laying the groundwork for my future endeavors.

CONTENT

- 1) BIOCON SYNGENE - BUILDING S20B
- 2) SAURAV CHEMICALS - KNOWLEDGE CENTRE
- 3) ANTHEM BIOSCIENCES - BUILDING CP7
- 4) GD WALDNER - EPSILON - ASHOKA LAB
- 5) MISCELLANEOUS WORKS
- 6) STELLA POLARIS - OMEXA



BIOCON SYNGENE - BUILDING S20B

CLIENT: SYNGENE

USAGE: PHARMACEUTICAL R&D LABORATORIES

LOCATION: BIOCON PARK, BENGALURU

SOFTWARE USED: AutoCAD, Sketchup, Enscape

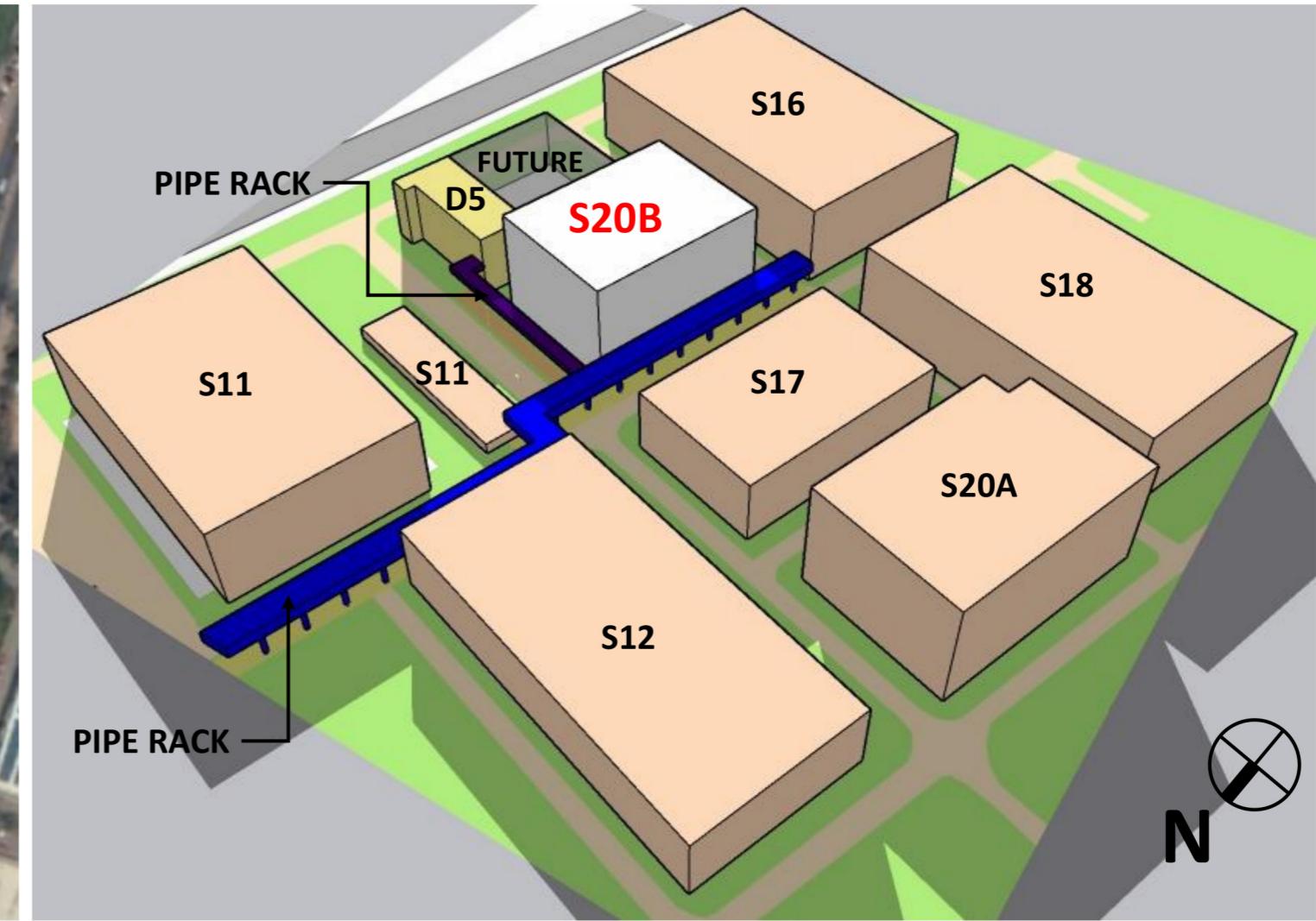
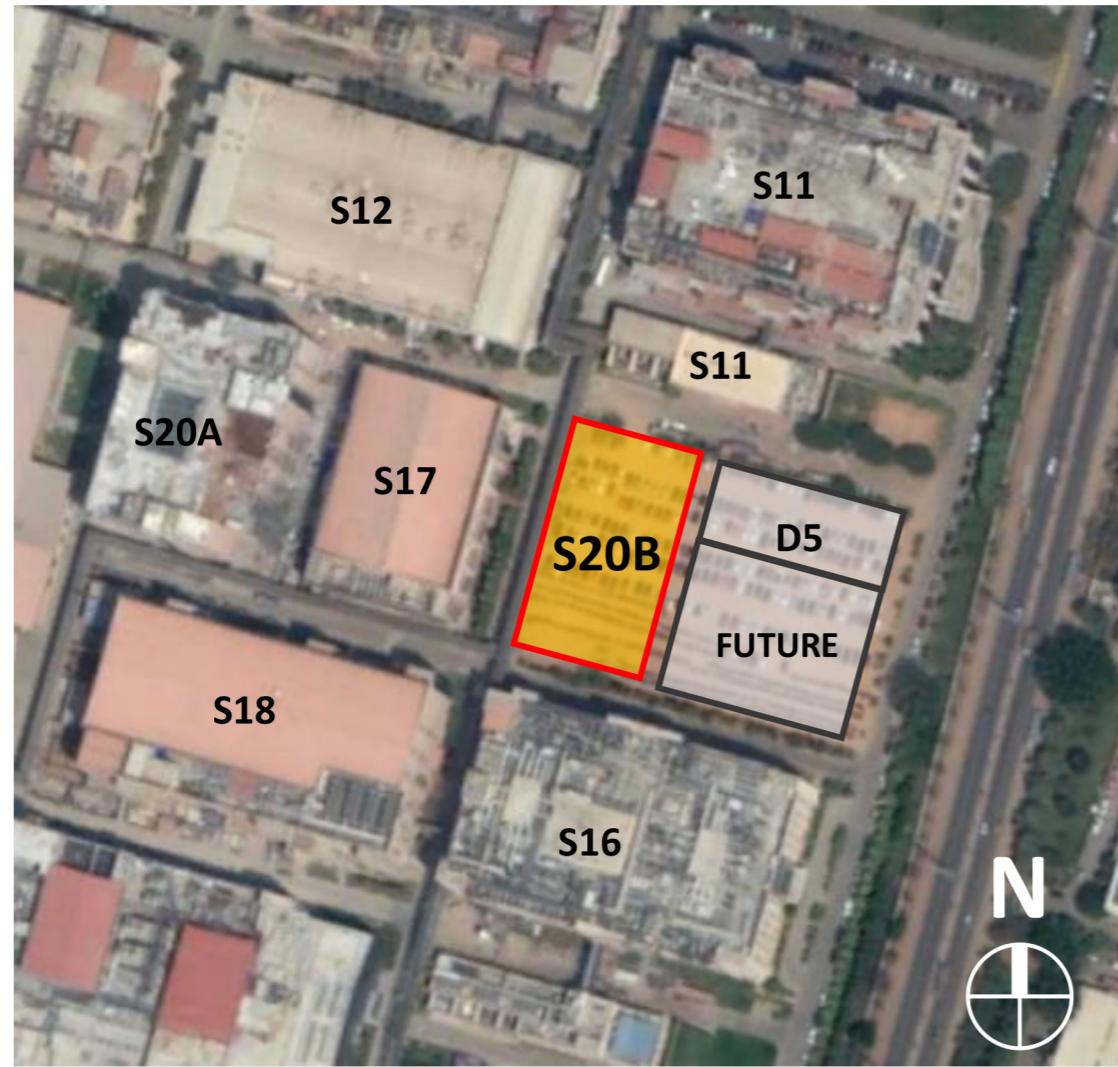
SIZE: 6 stories, ~120,000 sqft = ~11,000 sq.m

STRUCTURE TYPE: RCC

STAGE OF WORK: Primary structure under construction

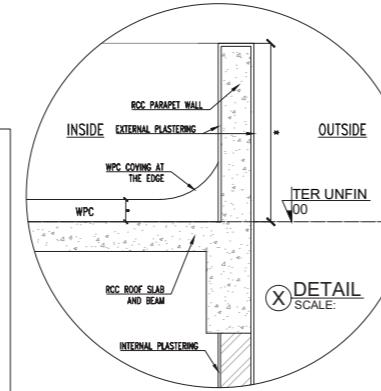
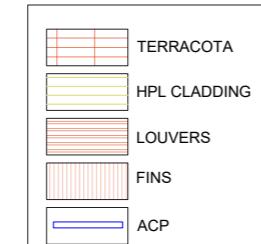
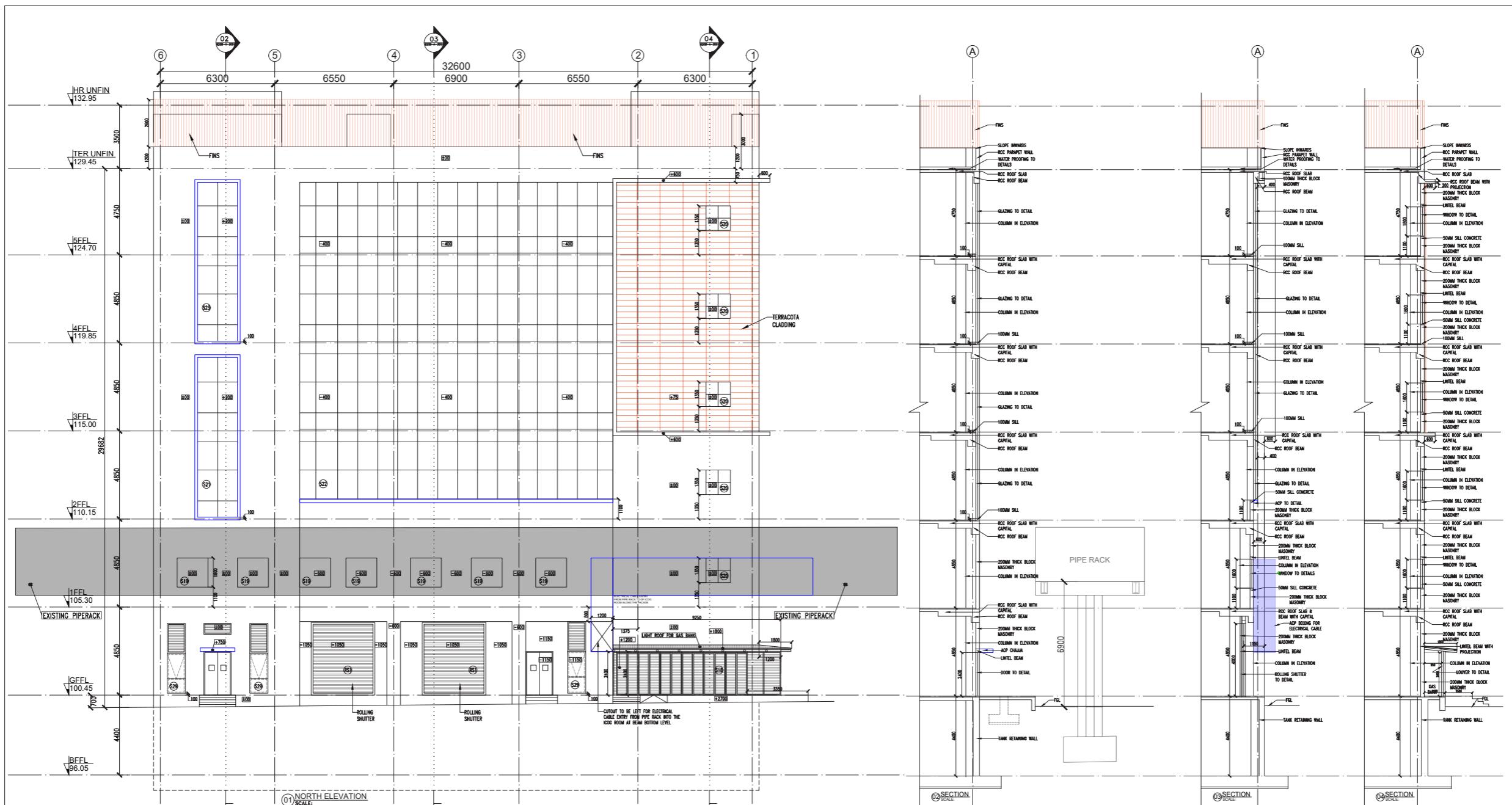
Biocon is a leading biotechnology company focused on generics, biosimilars, research services, and novel biologics. Its subsidiary, Syngene, is a contract research, development, and manufacturing organization (CRDMO) offering integrated scientific services across drug discovery, development, and manufacturing. Syngene operates from the Biocon SEZ Park in Bommasandra, Bangalore, a 90-acre facility. S20B is a building in this park, which features a car parking basement, and six floors that houses state-of-the-art laboratories. The S20B building is currently under construction, with the RCC structure's slabs, beams, and columns being built.

PROJECT CONTEXT



- BIOCON PARK, BENGALURU, KARNATAKA
- SEISMIC ZONE: 2
- WIND SPEED: 33 m/s ~ 120 km/hr
- SITE DIMENSIONS: 70m X 47.5 m
- BUILDING DIMENSIONS: 57.35 X 33.35
- FLOOR PLATE AREA (Ground Floor)- 1,680 sqm ~ 18,094 sft
- FLOOR PLATE AREA (Typical Floor)- 1,912 sqm ~ 20,580 sft
- REFUGE AREA: 120 sqm. ON LEVEL 6.
- BUILDING HEIGHT : 30 m (for Lab/ office) or 18m (for production)





PURPOSE

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS (mm)
2. NOT MEASURE DRAWING. FOLLOW WRITTEN DIMENSIONS
3. ANY DISCREPANCY SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS.
4. GOOD FOR CONSTRUCTION VALID SUBJECT TO APPROPRIATE STATUTORY APPROVALS
5. OPENINGS FOR ALL EQUIPMENT SHALL BE AS PER DETAILED DRAWINGS
6. MASONRY WALLS AROUND DOORS AND WINDOWS SHALL BE AS PERMITTED AS PER VENDOR DETAILS
7. CLEAR OPENINGS FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWINGS.

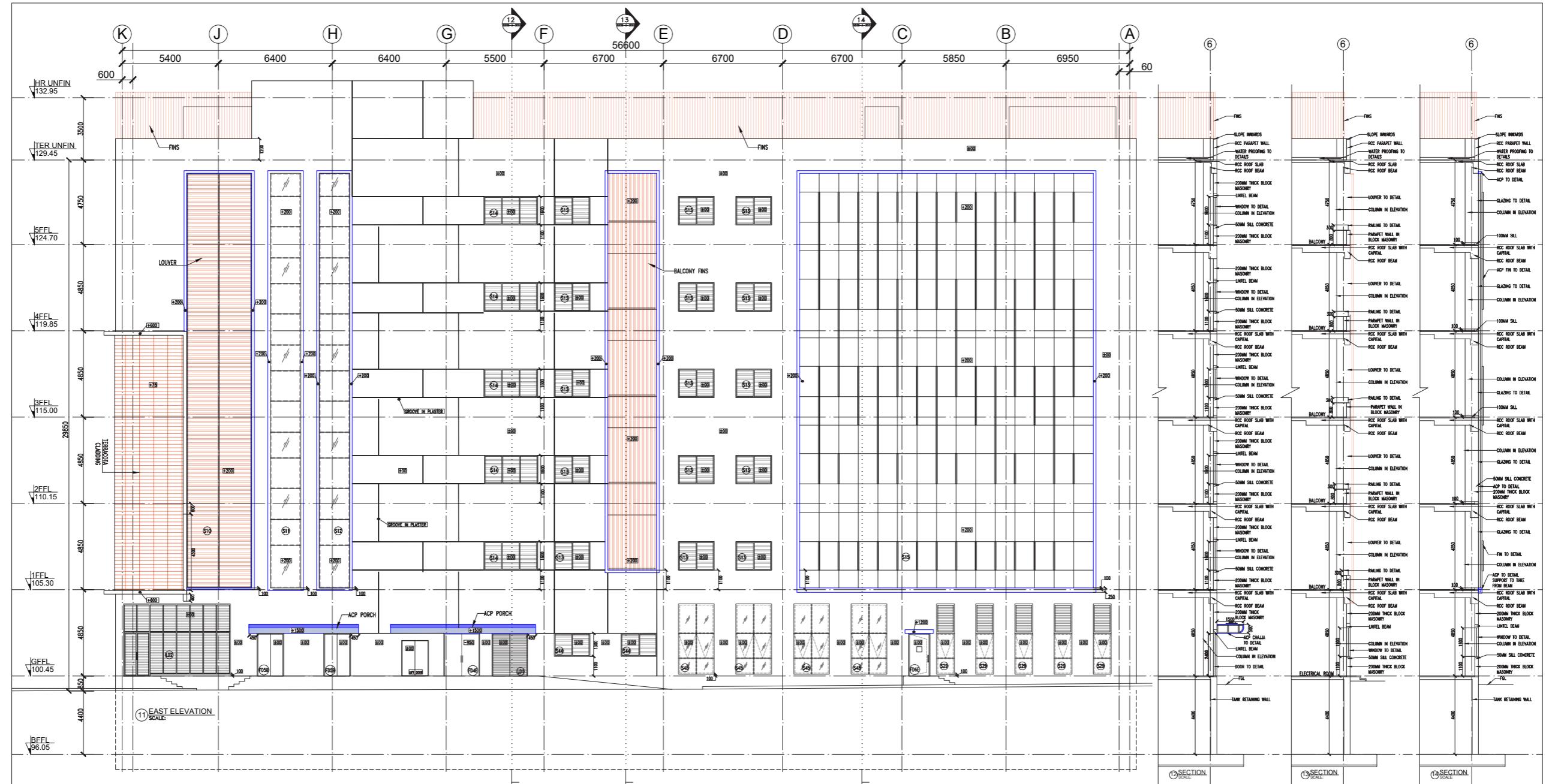
S	O	N	S	TITLE	DEALT BY:
I	O			NORTH ELEVATION AND CHORD SECTIONS	SANJAY
V				DRAWING NO.: S20B-A-3001	DRAWN BY: POORNIMA.R
E				TYPE: ARCHITECTURE	CLIENT:
R2	27-03-2024			GOOD FOR CONSTRUCTION	Syngene
R1	08-02-2024			GOOD FOR CONSTRUCTION	SYNGENE INTERNATIONAL LTD
R0	04-01-2023			GOOD FOR CONSTRUCTION	ARCHITECTS & PRIME CONSULTANTS:
ROA	27-10-2023			FOR INFORMATION ONLY	studio
				PROJECT: S20B	SCALE: 1:125
				REV. NO.	DATE
				DESCRIPTION	

WORK CONTRIBUTION:

- 1) Adjusted glazing & windows to match newly approved sill heights, in both elevation and chord section.
- 2) Made addition of '100mm sill' to chord sections.
- 3) Drafted latest version of 'S18'.
- 4) Checked entire drawing and schedules to eliminate any discrepancies in number of glazings of each type, dimensions of openings, sill & lintel heights.

SOFTWARE USED:

- 1) AutoCAD



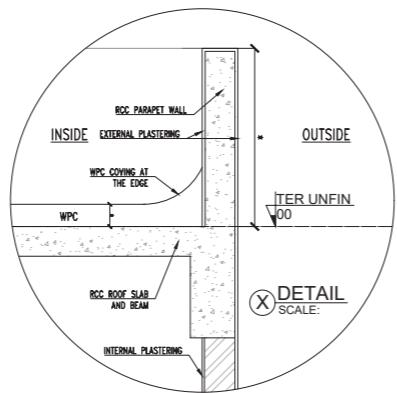
TERRACOTA

 HPL CLADDING

 LOUVERS

 FINS

 ACP



PURPOSE

NOTES:
 1. ALL DIMENSIONS ARE IN MILLIMETERS (MM)
 2. DO NOT MEASURE DRAWING. FOLLOW WRITTEN DIMENSIONS
 3. ANY DISCREPANCY SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS.
 4. GOOD FOR CONSTRUCTION VALID SUBJECT TO APPROPRIATE STATUTORY APPROVALS
 5. OPENINGS FOR ALL EQUIPMENT SHALL BE AS PER DETAILED DRAWINGS.
 6. ALL NEW WALLS, GROUND FLOOR, OR STAIRS AND HOIST SHALL BE BUILT AS PER VENDOR DETAILS.
 7. CLEAR OPENING SIZES FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWING.

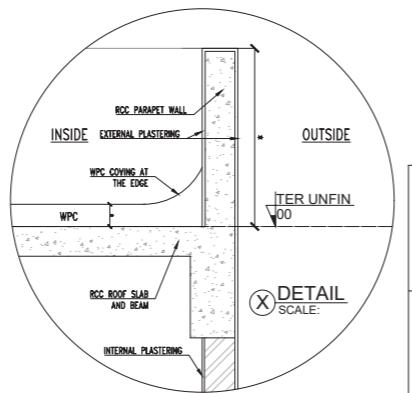
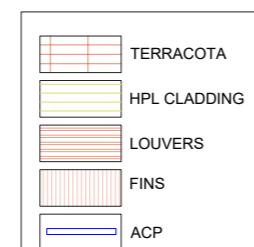
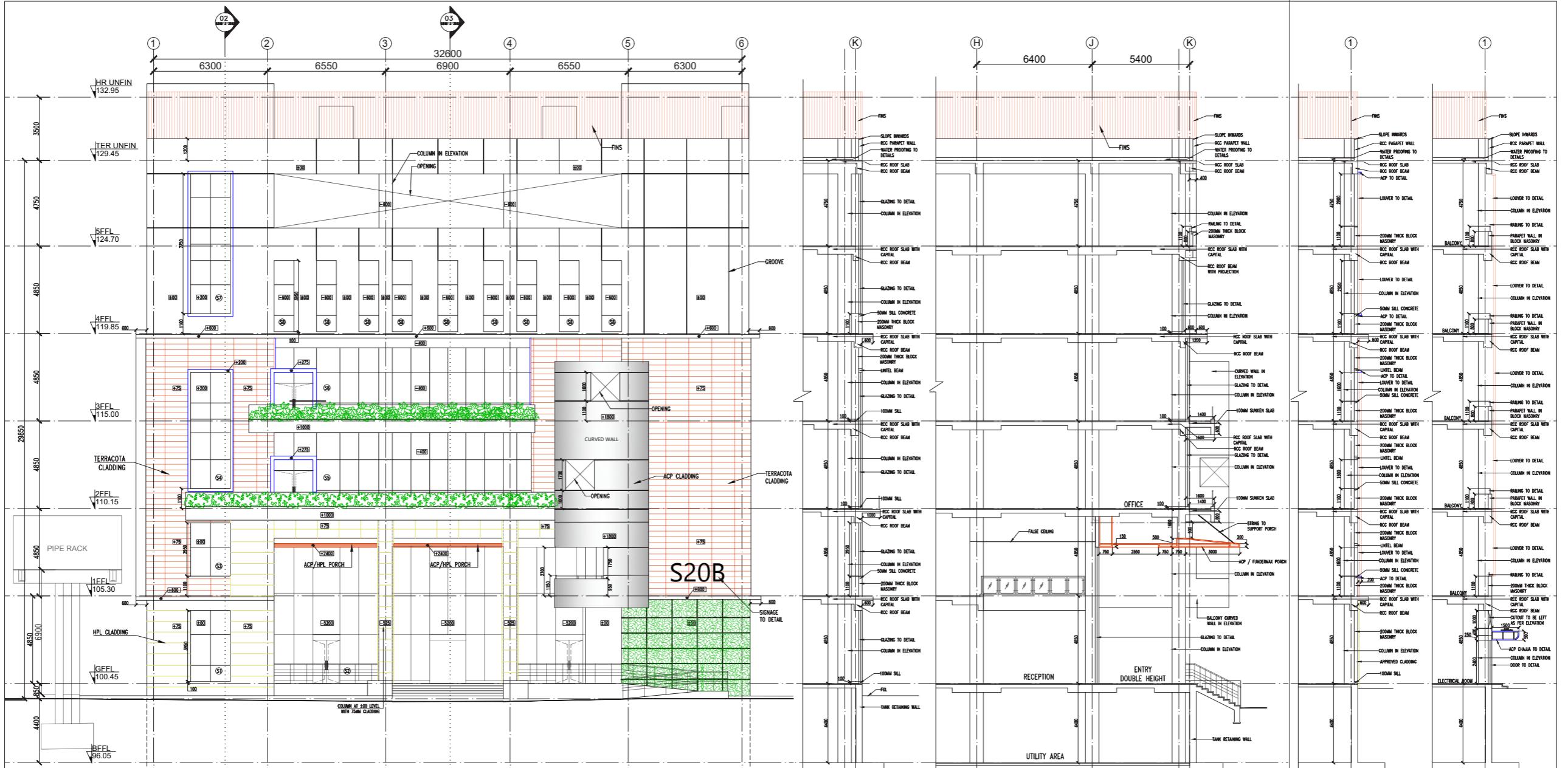
TITLE		DRAWING NO.: S20B-A-3004		PROJECT NO.: 2201
SECTION		TYPE: ARCHITECTURE		CLIENT:
R2		27-03-2024.	GOOD FOR CONSTRUCTION	Syngene
R1		08-02-2024	GOOD FOR CONSTRUCTION	SYNGENE INTERNATIONAL LTD
R0		04-01-2024	GOOD FOR CONSTRUCTION	ARCHITECTS & PRIME CONSULTANTS:
R0A	27-10-2023		FOR INFORMATION ONLY	studio
REV. NO.	DATE		DESCRIPTION	ARCHINOVATE INNOVATION IN ARCHITECTURE

WORK CONTRIBUTION:

- Adjusted glazing & windows to match newly approved sill heights, in both elevation and chord section.
- Made addition of '100mm sill' to chord sections.
- Drafted latest version of 'S18'.
- Checked entire drawing and schedules to eliminate any discrepancies in number of glazings of each type, dimensions of openings, sill & lintel heights.

SOFTWARE USED:

- AutoCAD



PURPOSE
NOTES
1. ALL DIMENSIONS ARE IN MILLIMETERS (MM)
2. DO NOT MEASURE DRAWING. FOLLOW WRITTEN DIMENSIONS
3. ANY DISCREPANCY SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS.
4. GOOD FOR CONSTRUCTION SUBJECT TO APPROPRIATE STATUTORY APPROVALS
5. OPENINGS FOR ALL EQUIPMENT SHALL BE AS PER DETAILED DRAWINGS.
6. WHERE NEW WALLS ARE FOUND DIMENSIONS OF DOORS AND HOIST SHALL BE BUILT AS PER VENDOR DETAILS.
7. CLEAR OPENING SIZES FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWING.

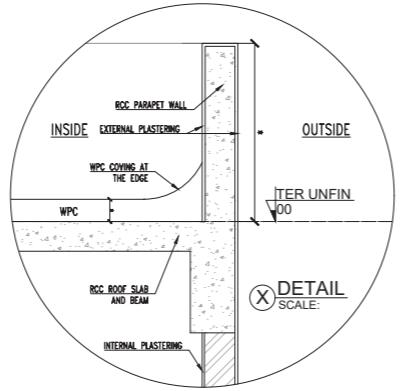
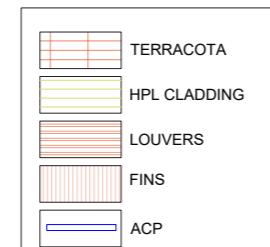
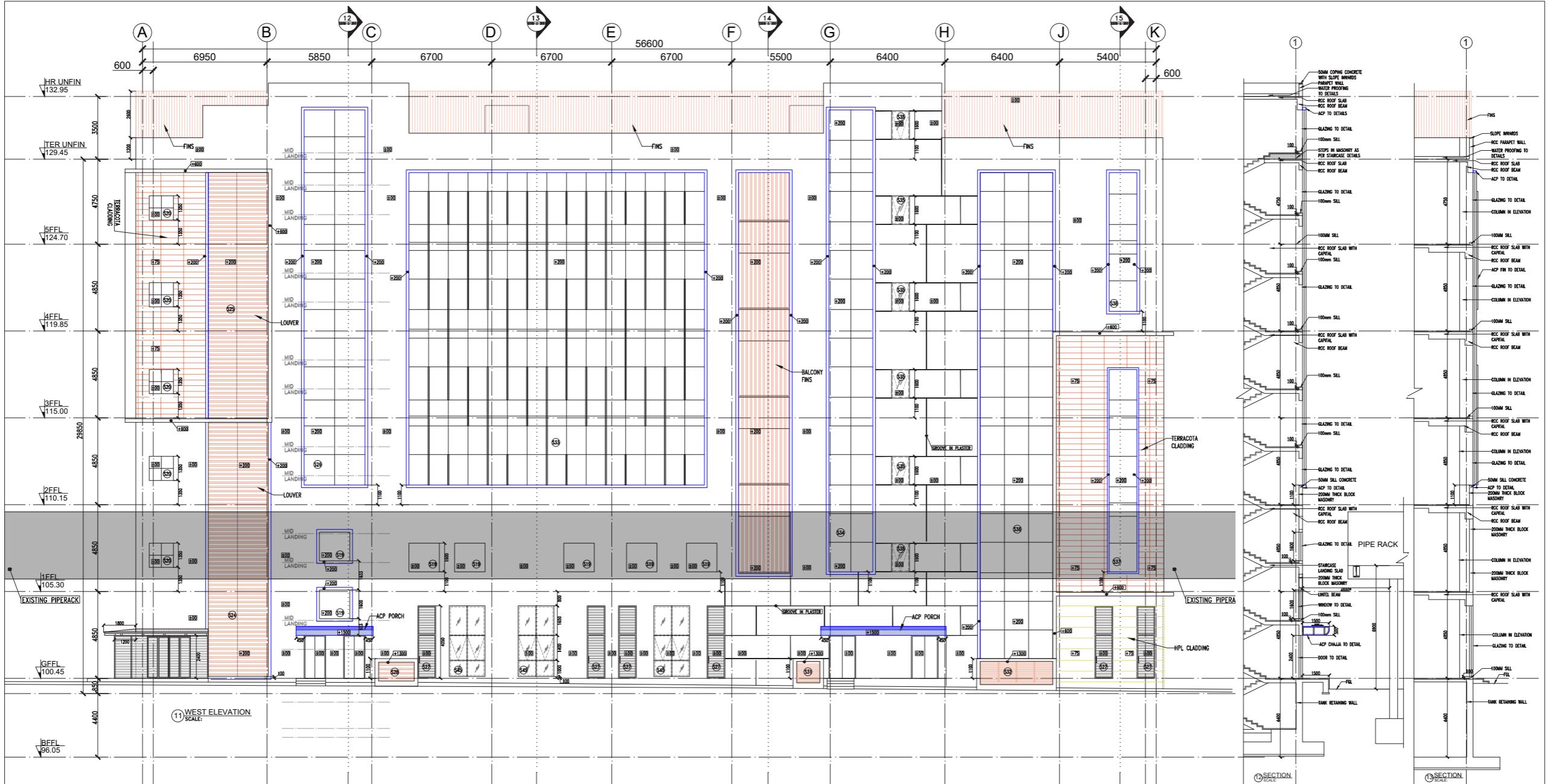
TITLE		DRAWING NO.: S20B-A-3003		PROJECT NO.: 2201
SOUTH ELEVATION AND CHORD SECTIONS		TYPE: ARCHITECTURE		CLIENT:
				SYNGENE SYNGENE INTERNATIONAL LTD
SITE: BIOCON PARK, SEZ, BOMMASANDRA INDUSTRIAL ESTATE-PHASE-IV BOMMASANDRA-JIGANI LINK ROAD, BANGALORE 560099		PROJECT: S20B		ARCHITECTS & PRIME CONSULTANTS: studio ARCHINOVATE INNOVATION IN ARCHITECTURE
R2	27-03-2024	GOOD FOR CONSTRUCTION		
R1	08-02-2024	GOOD FOR CONSTRUCTION		
R0	04-01-2024	GOOD FOR CONSTRUCTION		
R0A	27-10-2023	FOR INFORMATION ONLY		
REV. NO.	DATE	DESCRIPTION	SCALE:	1:125

WORK CONTRIBUTION:

- Adjusted glazing & windows to match newly approved sill heights, in both elevation and chord section.
- Made addition of '100mm sill' to chord sections.
- Drafted latest version of 'S18'.
- Checked entire drawing and schedules to eliminate any discrepancies in number of glazings of each type, dimensions of openings, sill & lintel heights.

SOFTWARE USED:

- AutoCAD



PURPOSE

NOTES:
 1. ALL DIMENSIONS ARE IN MILLIMETERS (MM).
 2. DO NOT MEASURE DRAWING. FOLLOW WRITTEN DIMENSIONS.
 3. ANY DISCREPANCY SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS.
 4. GOOD FOR CONSTRUCTION SUBJECT TO APPROPRIATE STATUTORY APPROVALS.
 5. OPENINGS FOR ALL EQUIPMENT SHALL BE AS PER DETAILED DRAWINGS.
 6. ALL NEW WALLS, GROUND FLOOR, OR STAIRS AND HOIST SHALL BE BUILT AS PER VENDOR DETAILS.
 7. CLEAR OPENING SIZES FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWING.

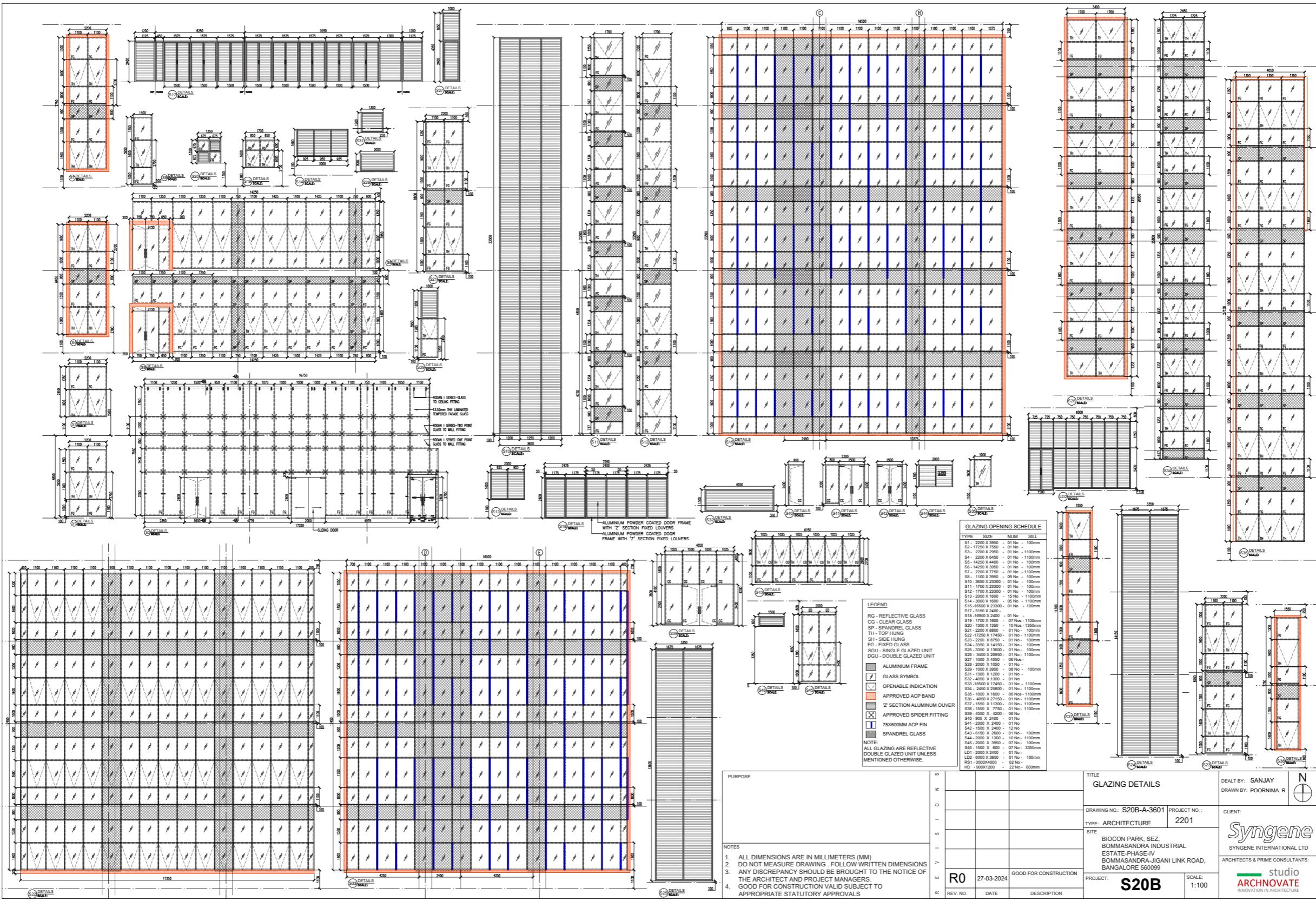
TITLE		
WEST ELEVATION AND CHORD SECTIONS		
DRAWING NO.:	S20B-A-3002	PROJECT NO.:
TYPE:	ARCHITECTURE	2201
SITE:	BIOCON PARK, SEZ, BOMMASANDRA INDUSTRIAL ESTATE-PHASE-IV BOMMASANDRA-JIGANI LINK ROAD, BANGALORE 560099	CLIENT:
PROJECT:	S20B	SCALE: 1:125
DEALT BY:	SANJAY	
DRAWN BY:	POORNIMA.R	
SYNGENE		
SYNGENE INTERNATIONAL LTD		
ARCHITECTS & PRIME CONSULTANTS:		
studio		
ARCHINOVATE		

WORK CONTRIBUTION:

- Adjusted glazing & windows to match newly approved sill heights, in both elevation and chord section.
- Made addition of '100mm sill' to chord sections.
- Drafted latest version of 'S18'.
- Checked entire drawing and schedules to eliminate any discrepancies in number of glazings of each type, dimensions of openings, sill & lintel heights.

SOFTWARE USED:

- AutoCAD

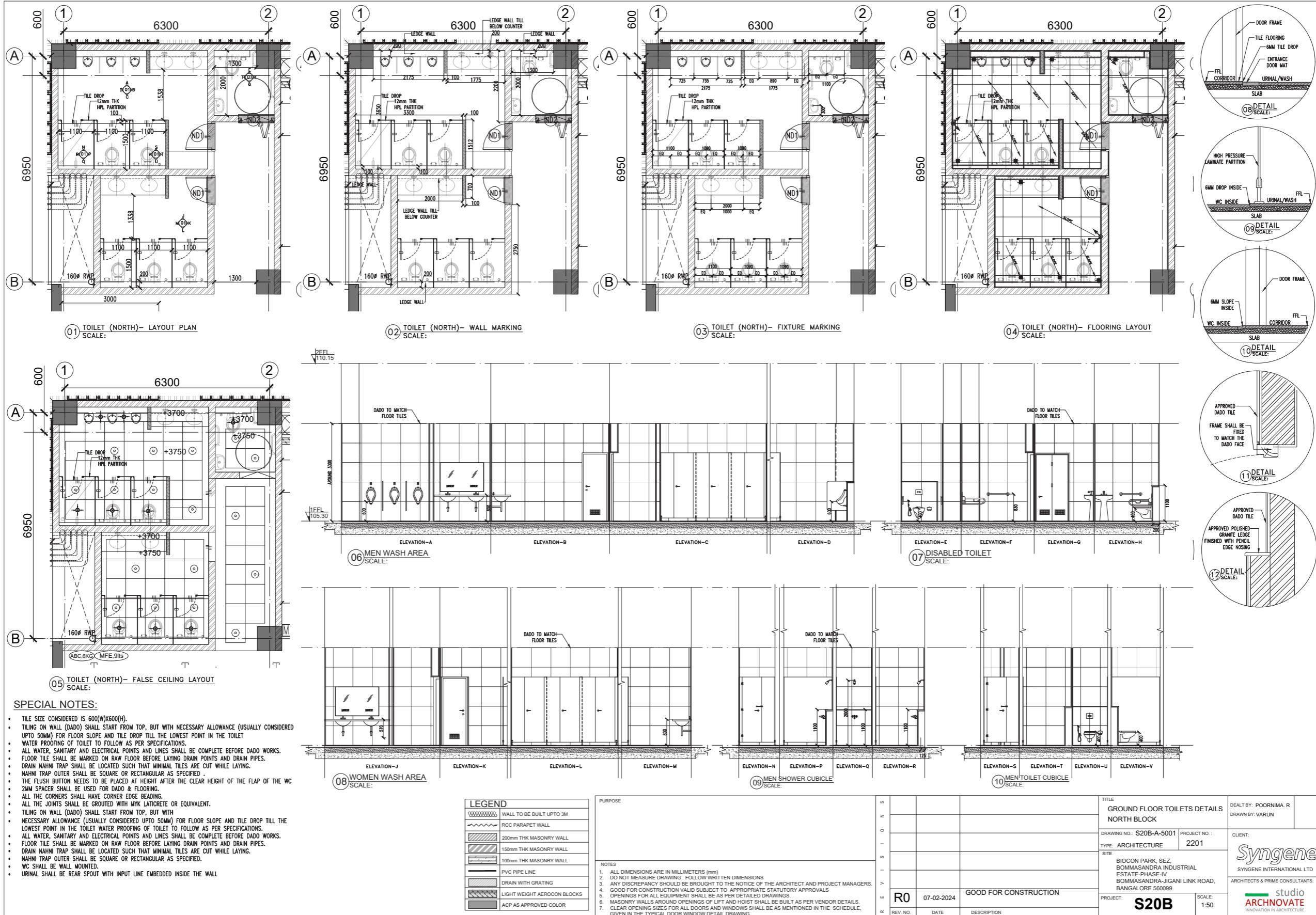


WORK CONTRIBUTION:

- Drafted details for 'LD2, S17, S39, S43'.
- Made minor corrections to the glazing details adjusting for the final approved sill and lintel levels.
- Checked accuracy of schedule table and made corrections.
- Put hatch indication to show spandrel glass for some of the glazings.

SOFTWARE USED:

- AutoCAD

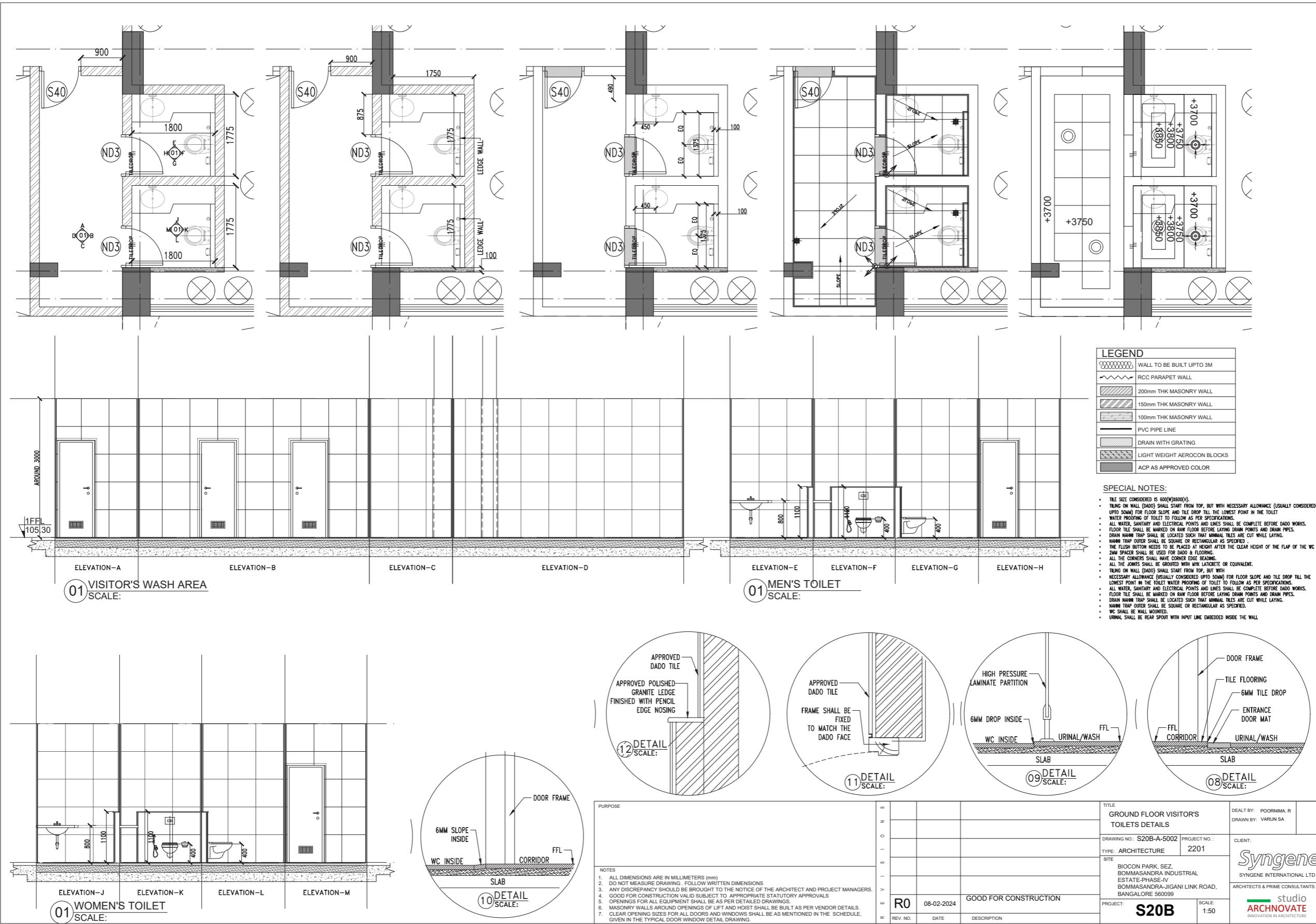


WORK CONTRIBUTION:

- Drew elevations of the rooms.
- Added annotations to the previously existing floor plan XREF.
- Made flooring detail, including flooring lines, start points, drain points, floor finish slope indication.
- Made wall marking plan and fixture marking plan.

SOFTWARE USED:

- AutoCAD

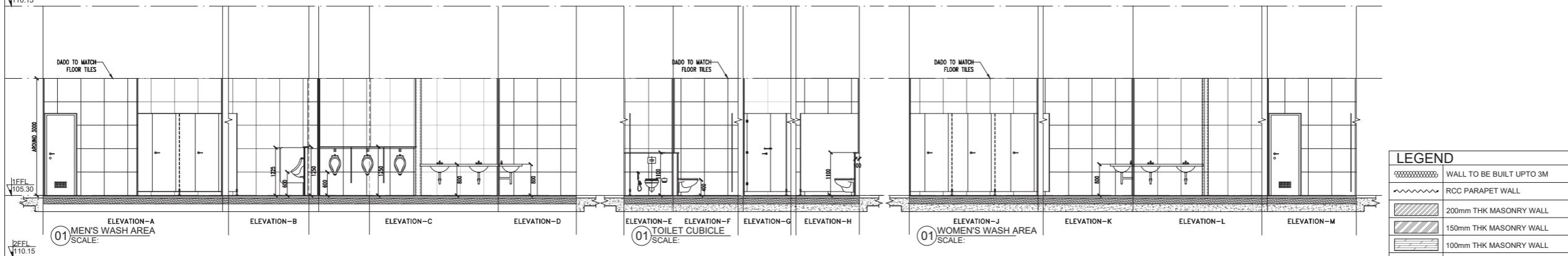
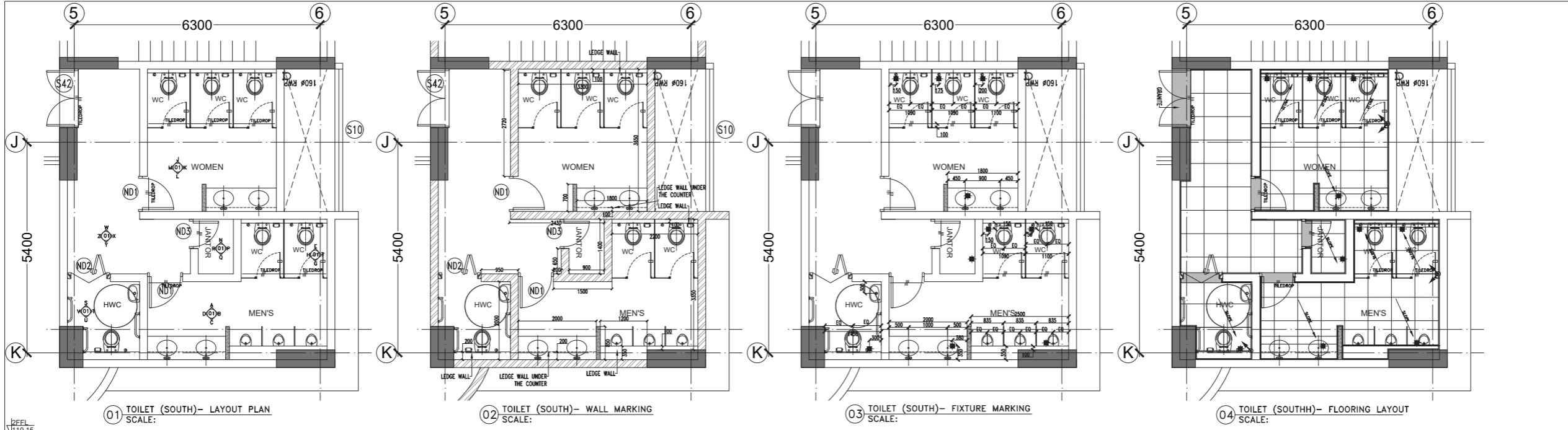


WORK CONTRIBUTION:

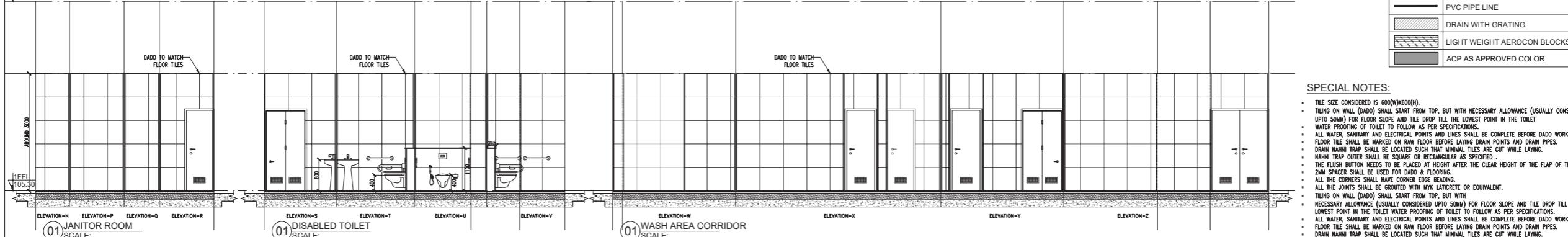
- 1) Drew all plans shown in the sheets from existing layout plan XREF.
- 2) Drew all elevations.

SOFTWARE USED:

- 1) AutoCAD

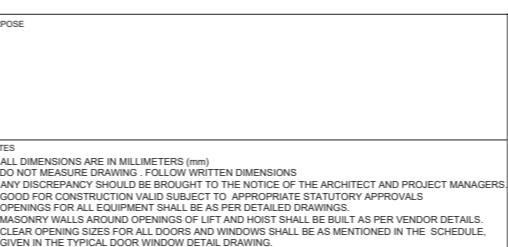
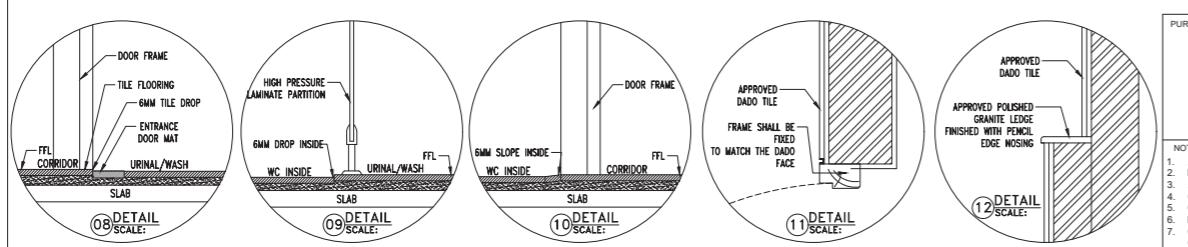


LEGEND	
	WALL TO BE BUILT UPTO 3M
	RCC PARAPET WALL
	20mm THK MASONRY WALL
	15mm THK MASONRY WALL
	10mm THK MASONRY WALL
	PVC PIPE LINE
	DRAIN WITH GRATING
	LIGHT WEIGHT AEROCON BLOCKS
	ACP AS APPROVED COLOR



SPECIAL NOTES:

- TILE SIZE CONSIDERED IS 600(W)X600(H).
- TILING ON WALL (DADO) SHALL START FROM TOP, BUT WITH NECESSARY ALLOWANCE (USUALLY CONSIDERED UPTO 50MM) FOR FLOOR SLOPE AND TILE DROP AT THE LOWEST POINT IN THE TOILET.
- ALL WATER, SANITARY AND ELECTRICAL POINTS PER SPECIFIED.
- ALL WATER, SANITARY AND ELECTRICAL POINTS AND LINES SHALL BE COMPLETE BEFORE DADO WORKS.
- FLOOR TILE SHALL BE MARKED ON RAW FLOOR BEFORE LAYING DRAIN POINTS AND DRAIN PIPES.
- DRAIN MAIN TRAP SHALL BE LOCATED SUCH THAT MINIMAL TILES ARE CUT WHILE LAYING.
- NAHM TRAP OUTER SHALL BE SQUARE OR RECTANGULAR AS SPECIFIED.
- ALL THE CORNERS SHALL BE ROUNDED AFTER THE CLEAR HEIGHT OF THE FLAP OF THE WC.
- 2MM SPACER SHALL BE USED FOR DADO & FLOORING.
- ALL THE CORNERS SHALL HAVE CORNER EDGE BEADING.
- ALL THE JOINTS SHALL BE GROUTED WITH MYK LATREITE OR EQUIVALENT.
- TILING ON WALL (DADO) SHALL START FROM TOP, BUT WITH NECESSARY ALLOWANCE (USUALLY CONSIDERED UPTO 50MM) FOR FLOOR SLOPE AND TILE DROP TILL THE LOWER POINT OF THE TOILET FLAP.
- ALL WATER, SANITARY AND ELECTRICAL POINTS AND LINES SHALL BE COMPLETE BEFORE DADO WORKS.
- FLOOR TILE SHALL BE MARKED ON RAW FLOOR BEFORE LAYING DRAIN POINTS AND DRAIN PIPES.
- DRAIN MAIN TRAP SHALL BE LOCATED SUCH THAT MINIMAL TILES ARE CUT WHILE LAYING.
- NAHM TRAP OUTER SHALL BE SQUARE OR RECTANGULAR AS SPECIFIED.
- WC SHALL BE WALL MOUNTED.
- URINAL SHALL BE REAR SPOUT WITH INPUT LINE EMBEDDED INSIDE THE WALL.



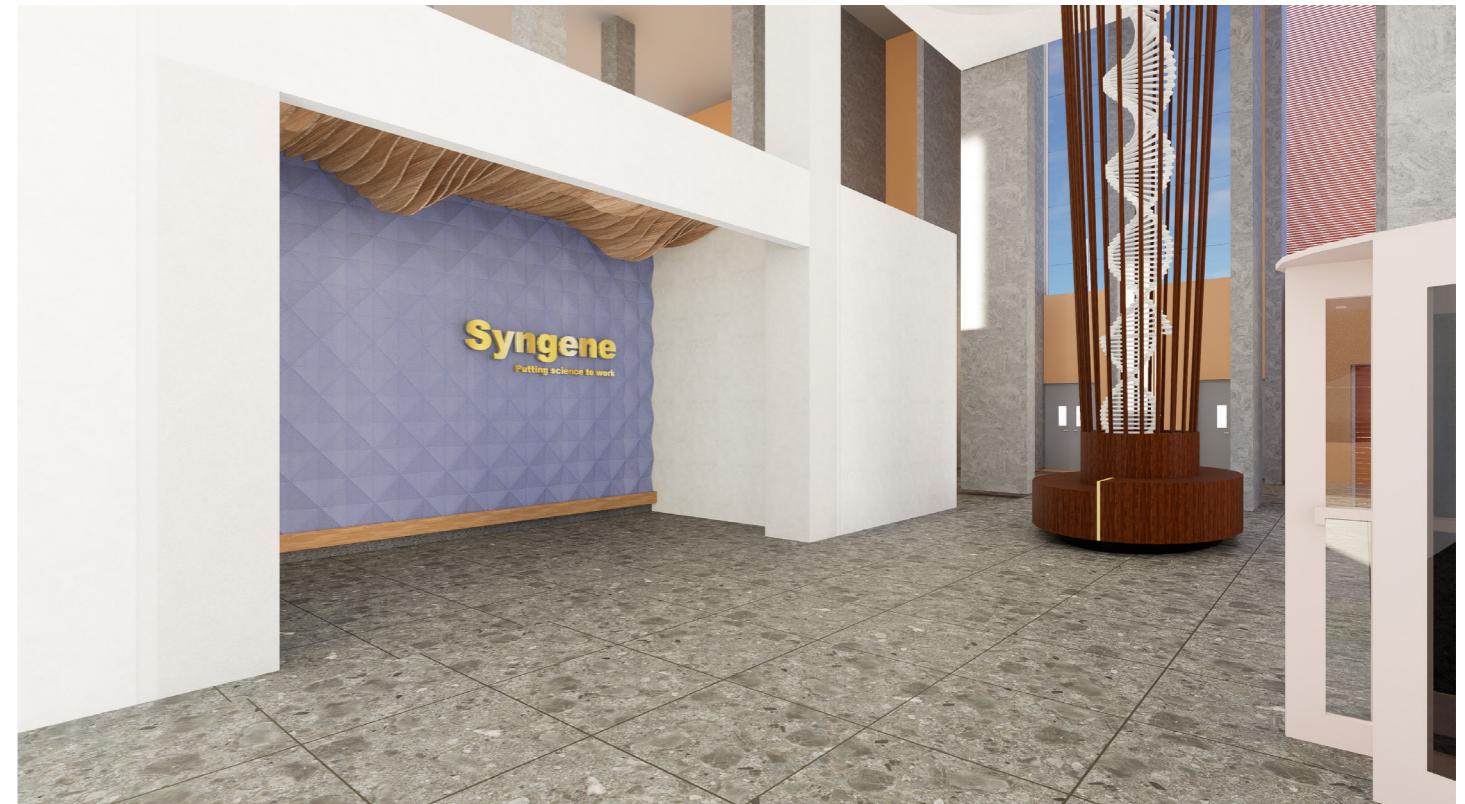
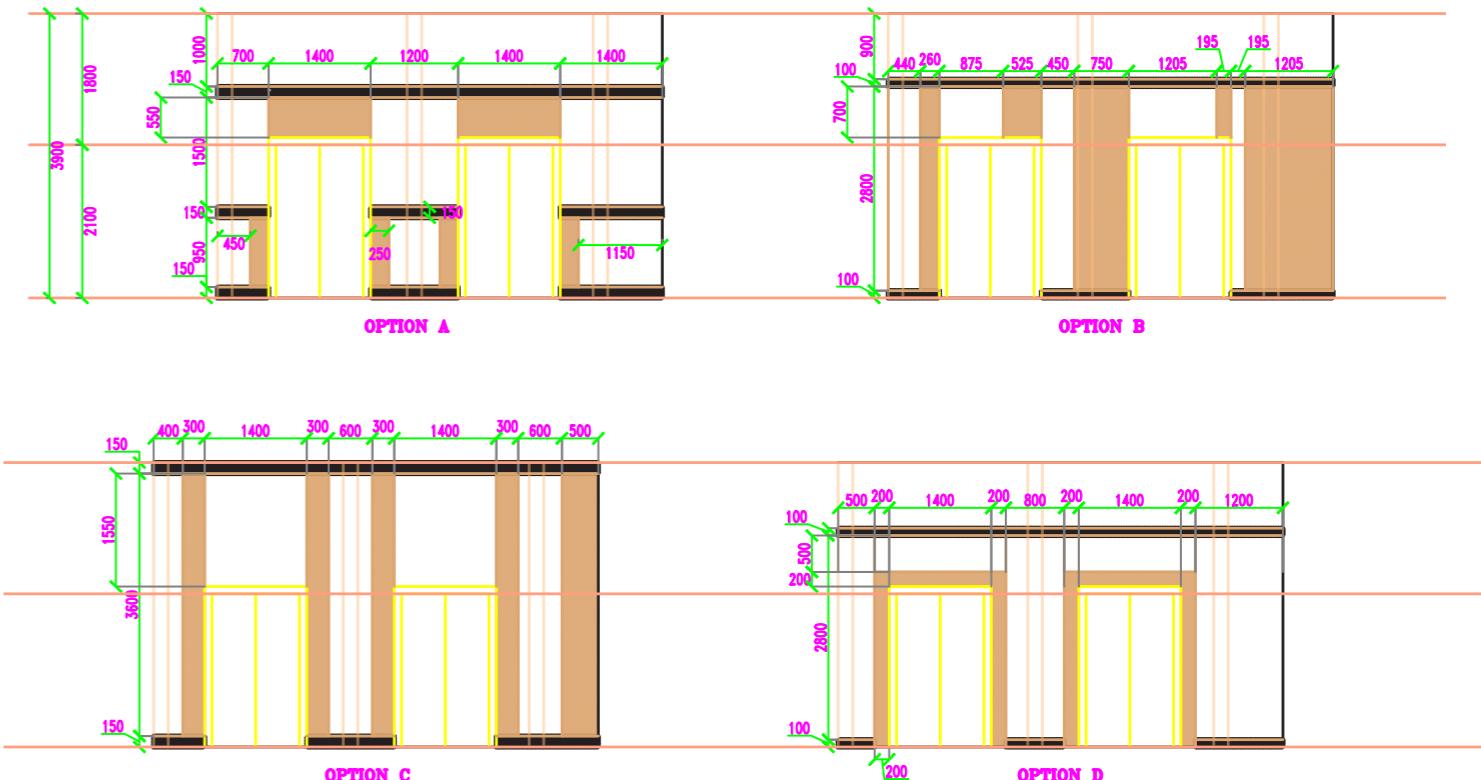
TITLE	FIRST FLOOR TOILETS DETAILS	
SOUTH BLOCK	DRAWN BY: POORNIMA R DEALT BY: VARUN SA	
TYPE: ARCHITECTURE	PROJECT NO.: 2201	
SITE	BIOCON PARK, SEZ, BOMMASANDRA INDUSTRIAL ESTATE-PHASE-IV BOMMASANDRA-JIGANI LINK ROAD, BANGALORE 560099	
PROJECT: S20B	SCALE: 1:50	studio ARCHINOVATE INNOVATION IN ARCHITECTURE

WORK CONTRIBUTION:

- Drew all plans shown in the sheets from existing layout plan XREF.
- Drew all elevations.
- Composed the sheet.

SOFTWARE USED:

- AutoCAD



WORK CONTRIBUTION:

- 1) Made concept rendered images for visualization purpose of granite design (not shown to client).
- 2) Made elevation drawings of cladding options.

SOFTWARE USED:

- 1) AutoCAD

SAURAV CHEMICALS - KNOWLEDGE CENTRE

Saurav Chemicals Ltd. (SCL) manufactures bulk drugs, APIs (Active Pharmaceutical Ingredients), and advanced intermediates, offering CDMO (Contract Development and Manufacturing Organization) services to clients. Headquartered in Panchkula near Chandigarh, SCL operates two manufacturing facilities in Derabassi, Mohali, and a marketing office in Delhi NCR. The SCL Knowledge Centre is located in Hyderabad.

CLIENT: Saurav Chemicals

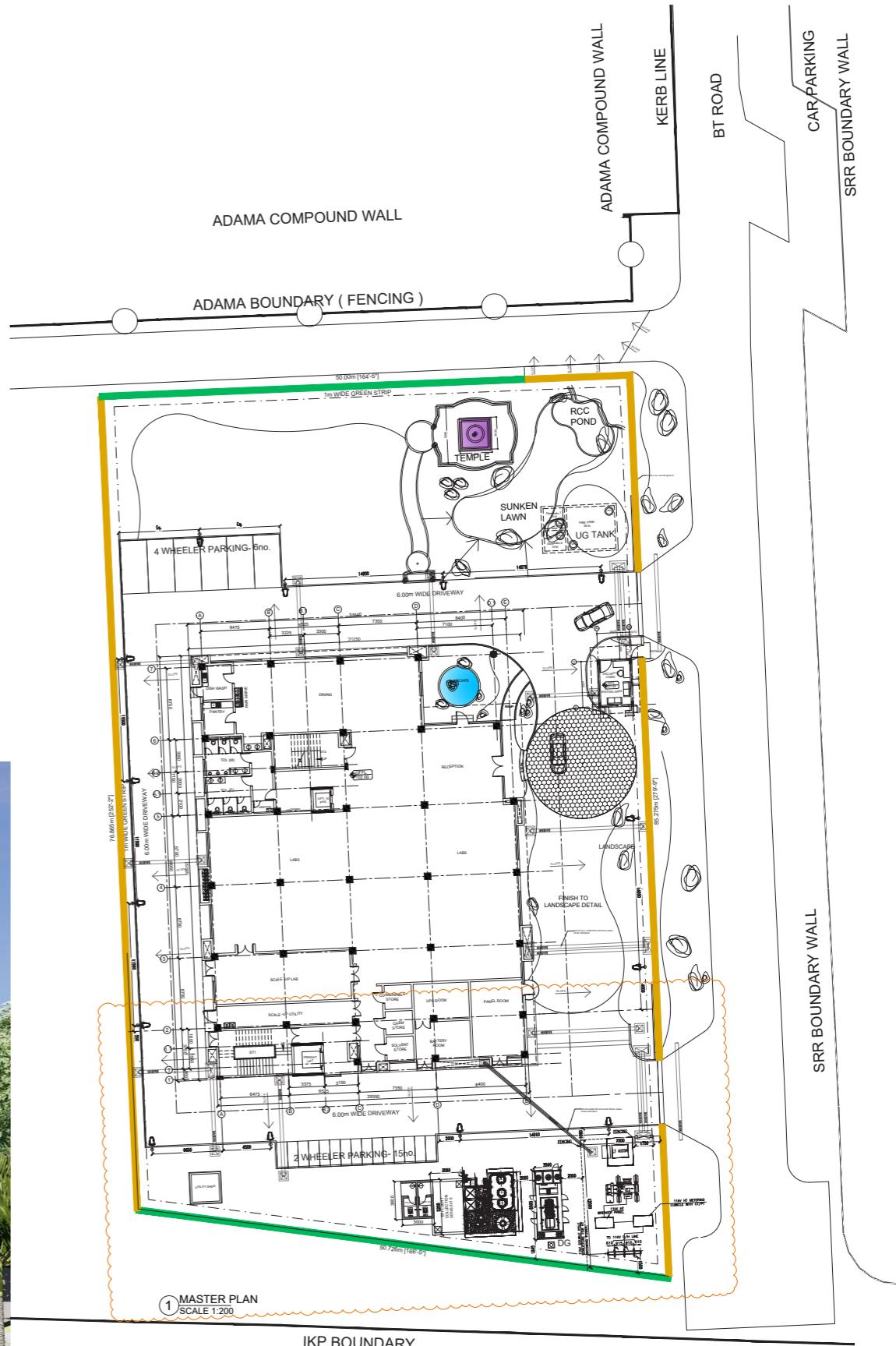
USAGE: Contract Research & Developement of APIs

LOCATION: Hyderabad

SIZE: 2 storeys, ~2,500 sq.m = ~27,000sqft

STAGE OF WORK: Under construction

SOFTWARE USED: AutoCAD, Revit, Sketchup, Enscape

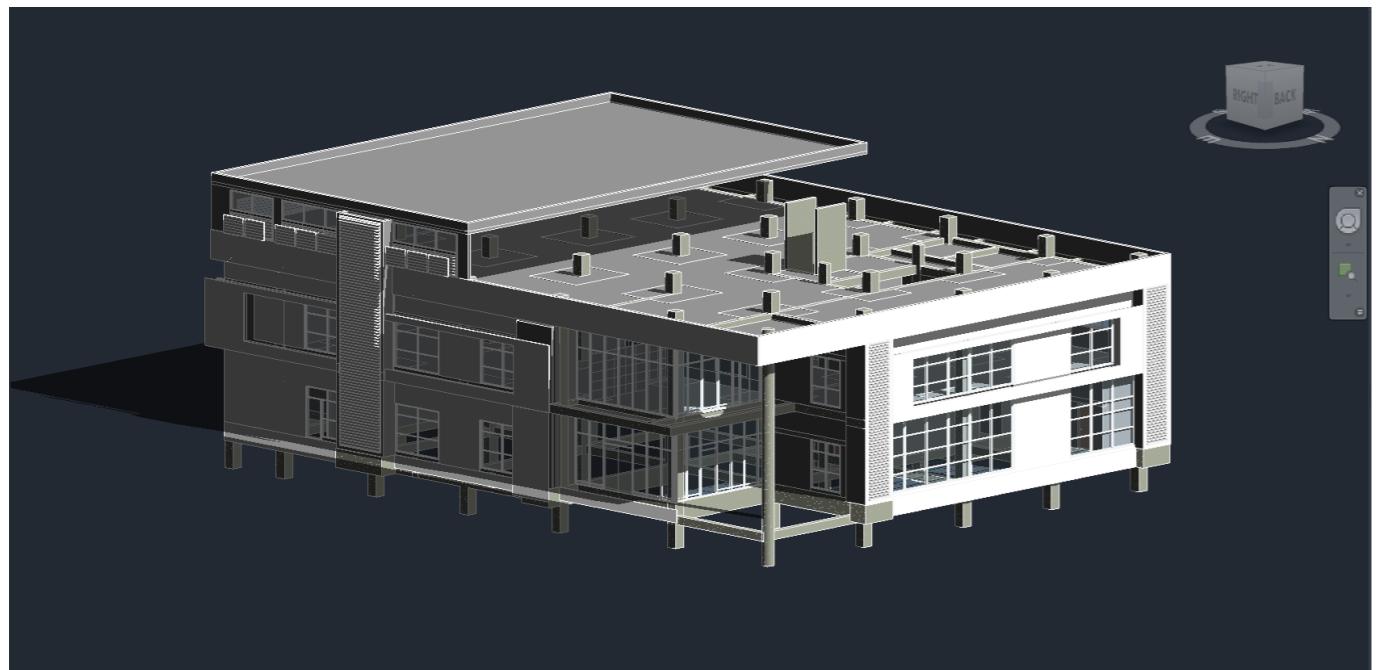


WORK CONTRIBUTION:

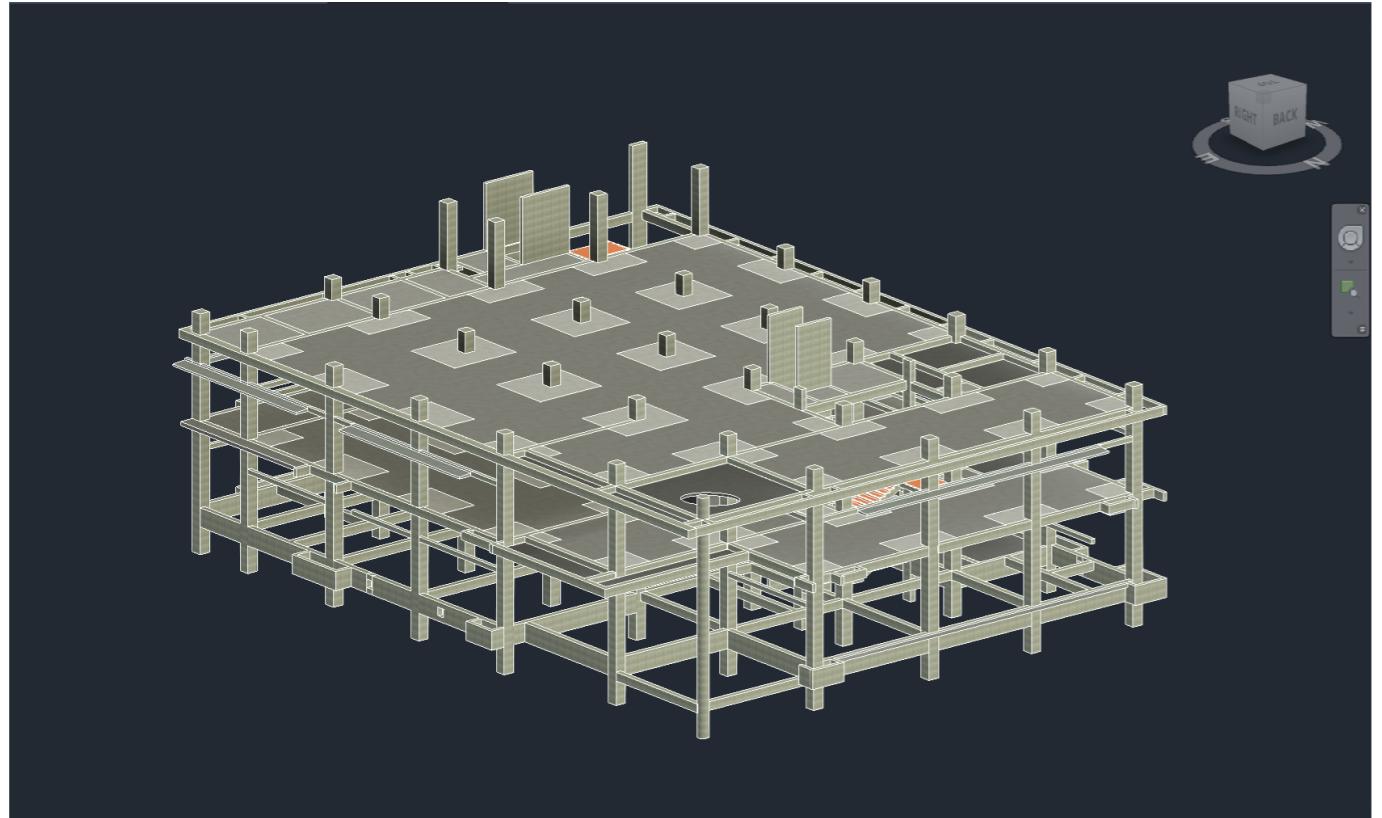
- 1) Made rendered images of facade.
 - 2) Added ramps and steps to site master plan drawing

SOFTWARE USED:

- 1) Sketchup
 - 2) Autocad
 - 3) Enscape



FULL 3D MODEL



STRUCTURAL MODEL

<Wall Schedule Copy 1>									
A	B	C	D	E	F	G	H	I	J
Mark	Length	Unconnected Height	Sill Height	Count	Base Constraint	Base Offset	Top Constraint	Top Offset	Area
S1	3190	2750	0.00	1	GF SLAB LVL	0	Up to level: LINTEL LVL GF - 2700	0	8 m ²
S2	3300	2580	1.25	2	SILL LVL GF - 125	0	Up to level: LINTEL LVL GF - 2700	0	8 m ²
S3	7450	4050	-0.50	1	PLINTH BEAM TOP LVL	0	Up to level: FF BEAM BOTTOM - 4000	0	30 m ²
S4	<varies>	2580	1.25	4	SILL LVL FF - 125	0	Up to level: LINTEL LVL FF - 2700	0	<varies>
S5	7150	4050	0.00	1	FF SLAB LVL - 4450	0	Up to level: TF BEAM BOTTOM - 8500	0	29 m ²
S6	9700	3880	1.25	1	SILL LVL GF - 125	0	Up to level: FF BEAM BOTTOM - 4000	0	37 m ²
S7	4900	3880	1.25	1	SILL LVL GF - 125	0	Up to level: FF BEAM BOTTOM - 4000	0	19 m ²
S8	8050	2580	1.25	1	SILL LVL FF - 125	0	Up to level: LINTEL LVL FF - 2700	0	21 m ²
S9	3150	2300	11.00	1	PARAPET LVL LVL TF - 1100	0	Up to level: HR UNFIN LVL	-100	7 m ²
S9a	4700	2300	11.00	2	PARAPET LVL TF - 1100	0	Up to level: HR UNFIN LVL	-100	11 m ²
S10	1700	1600	11.00	1	SILL LVL GF - 1100	0	Up to level: LINTEL LVL GF - 2700	0	3 m ²
S11	<varies>	800	19.00	4	<varies>	800	<varies>	0	1 m ²
S12	3400	1600	11.00	6	<varies>	0	<varies>	0	5 m ²
S13	2000	1600	11.00	1	SILL LVL GF - 1100	0	Up to level: LINTEL LVL GF - 2700	0	3 m ²
S14	1550	6400	21.00	1	SILL LVL GF - 1100	1000	Up to level: LINTEL LVL FF - 4000	0	9 m ²
S15	1700	8550	-0.50	1	GF SLAB LVL	0	Up to level: TF BEAM BOTTOM - 8500	0	13 m ²
S16	2550	1600	11.00	1	SILL LVL GF - 1100	0	Up to level: LINTEL LVL GF - 2700	0	4 m ²
S17	2920	2750		1	GF SLAB LVL	0	Up to level: LINTEL LVL GF - 2700	0	8 m ²
S18	4140	1600	11.00	1	SILL LVL FF - 1100	0	Up to level: LINTEL LVL FF - 2700	0	6 m ²
S19	2920	1600	11.00	1	SILL LVL FF - 1100	0	Up to level: TF SLAB LVL	-1750	5 m ²
S20	2200	2580	1.25	1	SILL LVL GF - 125	0	Up to level: LINTEL LVL GF - 2700	0	6 m ²
S20a	2200	2580	1.25	1	SILL LVL FF - 125	0	Up to level: LINTEL LVL FF - 2700	0	6 m ²
S21	1590	3580	7.25	1	FFL	725	Up to level: FF BEAM BOTTOM - 4000	300	5 m ²
S22	1600	8380	1.25	1	SILL LVL GF - 125	0	Up to level: TF BEAM BOTTOM - 8500	0	13 m ²
S23	1590	3430	0.00	1	FFL - 106.50	575	Up to level: TF BEAM BOTTOM - 8500	0	5 m ²
S24	<varies>	2700	0.00	3	0-A-GROUND FLOOR	0	Up to level: LINTEL LVL GF - 2700	0	<varies>
S25	3000	12200	1.25	1	SILL LVL GF - 125	0	Up to level: HR UNFIN LVL	-125	37 m ²
S26	1600	8380	1.25	2	SILL LVL GF - 125	0	Up to level: TF BEAM BOTTOM - 8500	0	13 m ²
S27	3000	5600	29.00	3	LINTEL LVL GF - 2700	200	<varies>	0	17 m ²
S28	3400	5600	29.00	1	LINTEL LVL GF - 2700	200	Up to level: LINTEL LVL FF - 4000	0	18 m ²
S29	3400	5600	29.00	1	LINTEL LVL GF - 2700	200	Up to level: LINTEL LVL FF - 4000	0	19 m ²
S30	1700	10100	-0.50	1	GF SLAB LVL	0	Up to level: TF SLAB LVL	1100	17 m ²
S31	20590	1350	11.00	1	PARAPET LVL TF - 1100	0	Up to level: LINTEL LVL TF - 2400	0	24 m ²
Grand total: 51		51							

<Floor Material Takeoff>							
A	B	C	D	E	F	G	H
Material: Name	Default Thickness	Area	Material: Unit weight	Material: Description	Material: Volume	Material: Cost	Total Cost
M25 - Concrete - 150mm sunken	150 38 m ²	23.6 kN/m ³	Concrete 25 MPa	5.76 m ³	4000.00	23056	
M25 - Concrete - 150mm sunken	150 38 m ²	23.6 kN/m ³	Concrete 25 MPa	5.77 m ³	4000.00	23077	
M25 - Concrete - 150mm sunken	150 28 m ²	23.6 kN/m ³	Concrete 25 MPa	4.20 m ³	4000.00	16791	
M25 - Concrete - 150mm sunken	150 5 m ²	23.6 kN/m ³	Concrete 25 MPa	0.78 m ³	4000.00	3124	
M25 - Concrete - 150mm sunken	150 12 m ²	23.6 kN/m ³	Concrete 25 MPa	1.86 m ³	4000.00	7455	
M25 - Concrete - 150mm	150 65 m ²	23.6 kN/m ³	Concrete 25 MPa	9.74 m ³	4000.00	38958	
M25 - Concrete - 150mm	150 20 m ²	23.6 kN/m ³	Concrete 25 MPa	3.05 m ³	4000.00	12207	
M25 - Concrete - 150mm sunken	150 40 m ²	23.6 kN/m ³	Concrete 25 MPa	5.97 m ³	4000.00	23873	
M25 - Concrete - 150mm	150 554 m ²	23.6 kN/m ³	Concrete 25 MPa	83.14 m ³	4000.00	332555	
M25 - Concrete - 200mm sunken	200 41 m ²	23.6 kN/m ³	Concrete 25 MPa	8.25 m ³	4000.00	32996	
M25 - Concrete - 200mm	200 99 m ²	23.6 kN/m ³	Concrete 25 MPa	19.80 m ³	4000.00	79192	
M25 - Concrete - 200mm	200 19 m ²	23.6 kN/m ³	Concrete 25 MPa	3.82 m ³	4000.00	15279	
M25 - Concrete - 200mm sunken	200 502 m ²	23.6 kN/m ³	Concrete 25 MPa	100.45 m ³	4000.00	401787	
M25 - Concrete - 200mm	200 24 m ²	23.6 kN/m ³	Concrete 25 MPa	4.89 m ³	4000.00	19546	
M25 - Concrete - 200mm	200 67 m ²	23.6 kN/m ³	Concrete 25 MPa	13.34 m ³	4000.00	53365	
M25 - Concrete - 200mm	200 1 m ²	23.6 kN/m ³	Concrete 25 MPa	0.26 m ³	4000.00	1053	
M25 - Concrete - 200mm	200 0 m ²	23.6 kN/m ³	Concrete 25 MPa	0.09 m ³	4000.00	376	
M25 - Concrete - 200mm	200 100 m ²	23.6 kN/m ³	Concrete 25 MPa	19.91 m ³	4000.00	79649	
M25 - Concrete - 200mm	200 502 m ²	23.6 kN/m ³	Concrete 25 MPa	100.46 m ³	4000.00	401846	
M25 - Concrete - 200mm	200 29 m ²	23.6 kN/m ³	Concrete 25 MPa	5.82 m ³	4000.00	23290	
M25 - Concrete - 200mm	200 4 m ²	23.6 kN/m ³	Concrete 25 MPa	0.74 m ³	4000.00	2968	
M25 - Concrete - 200mm	200 7 m ²	23.6 kN/m ³	Concrete 25 MPa	1.36 m ³	4000.00	5430	
M25 - Concrete - 450mm	450 202 m ²	23.6 kN/m ³	Concrete 25 MPa	91.10 m ³	4000.00	364381	
M25 - Concrete - 450mm	450 202 m ²	23.6 kN/m ³	Concrete 25 MPa	90.96 m ³	4000.00	363857	
Grand total: 24							

WORK CONTRIBUTION:

- 1) Made Revit project of SCL, including both structural and architectural elements.
- 2) Revit model was used by MEP consultants for ease of working and coordination.
- 3) Created schedules for facade glazing and RCC floor slabs to demonstrate the ease of calculating quantity and cost values.

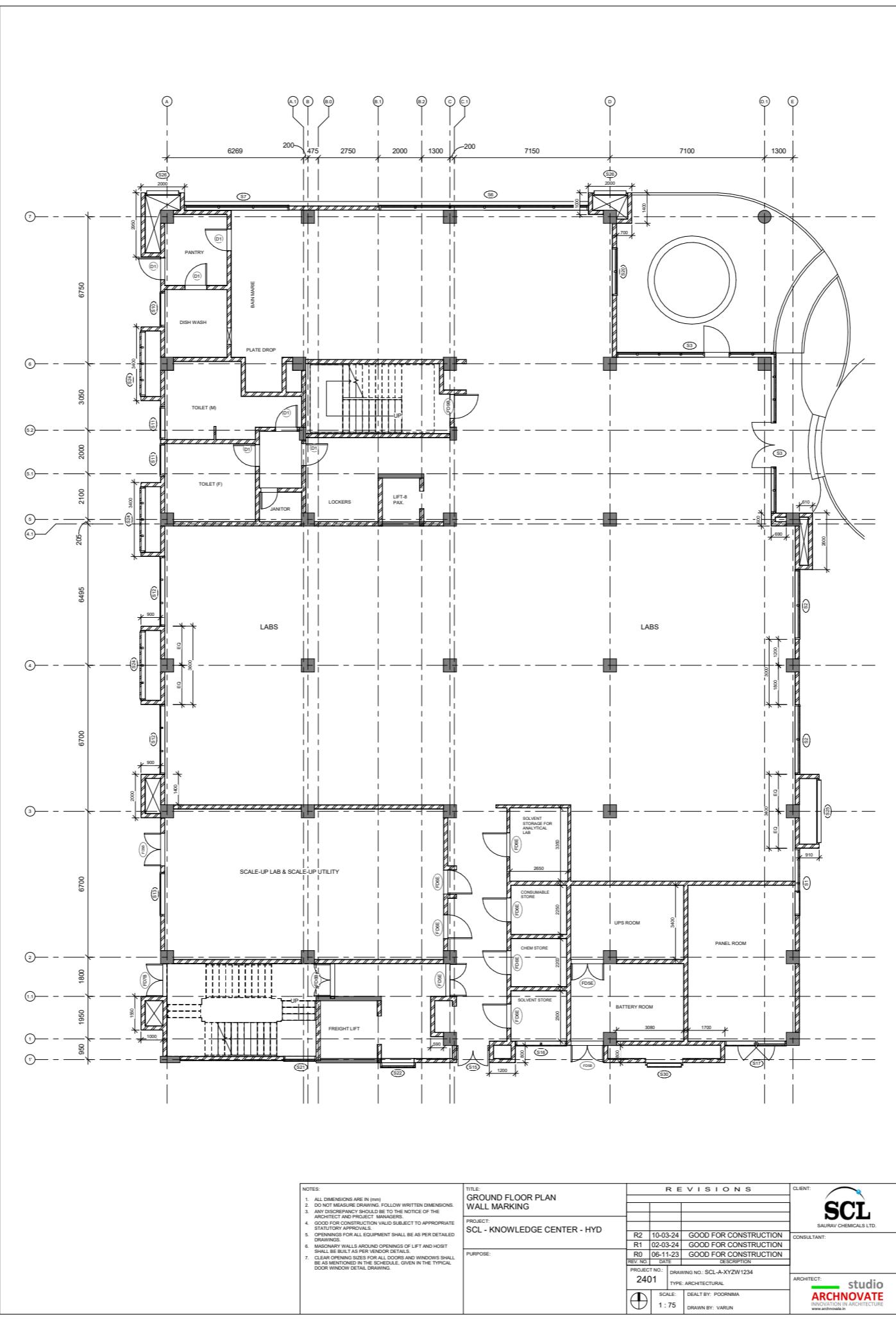
SOFTWARE USED:

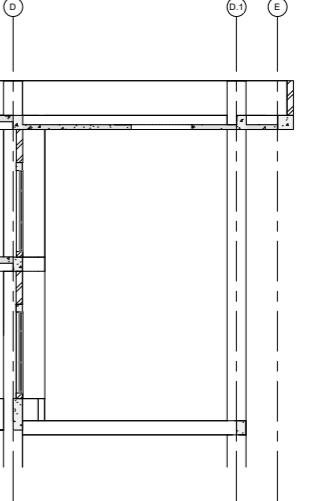
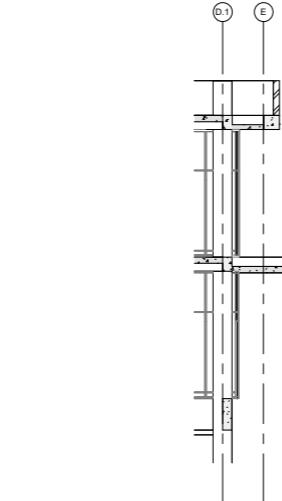
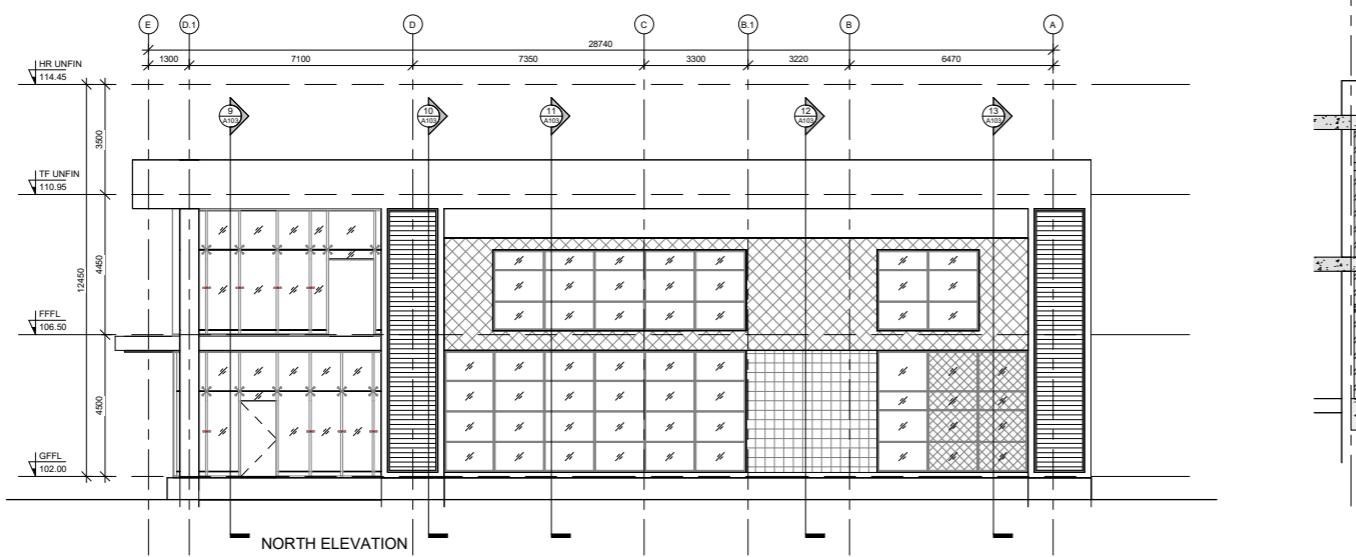
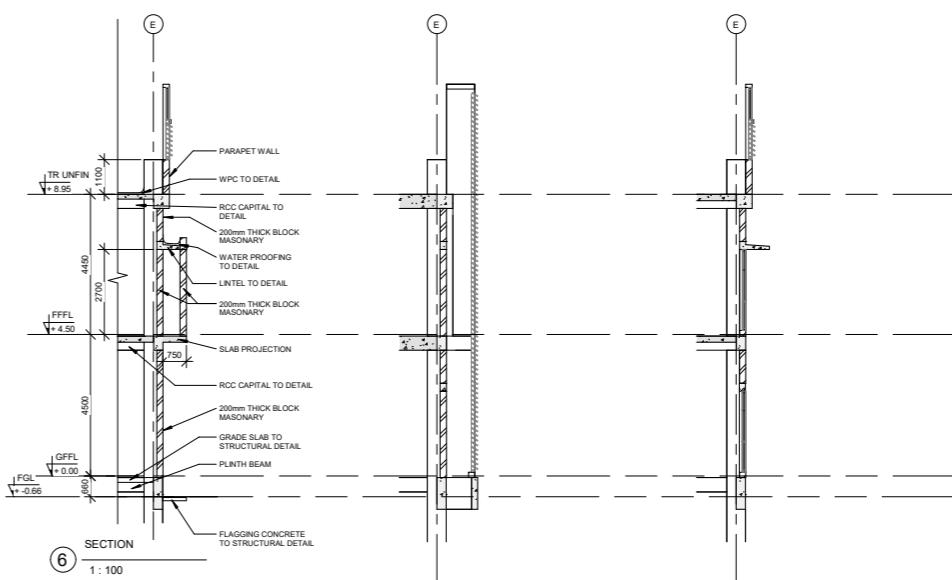
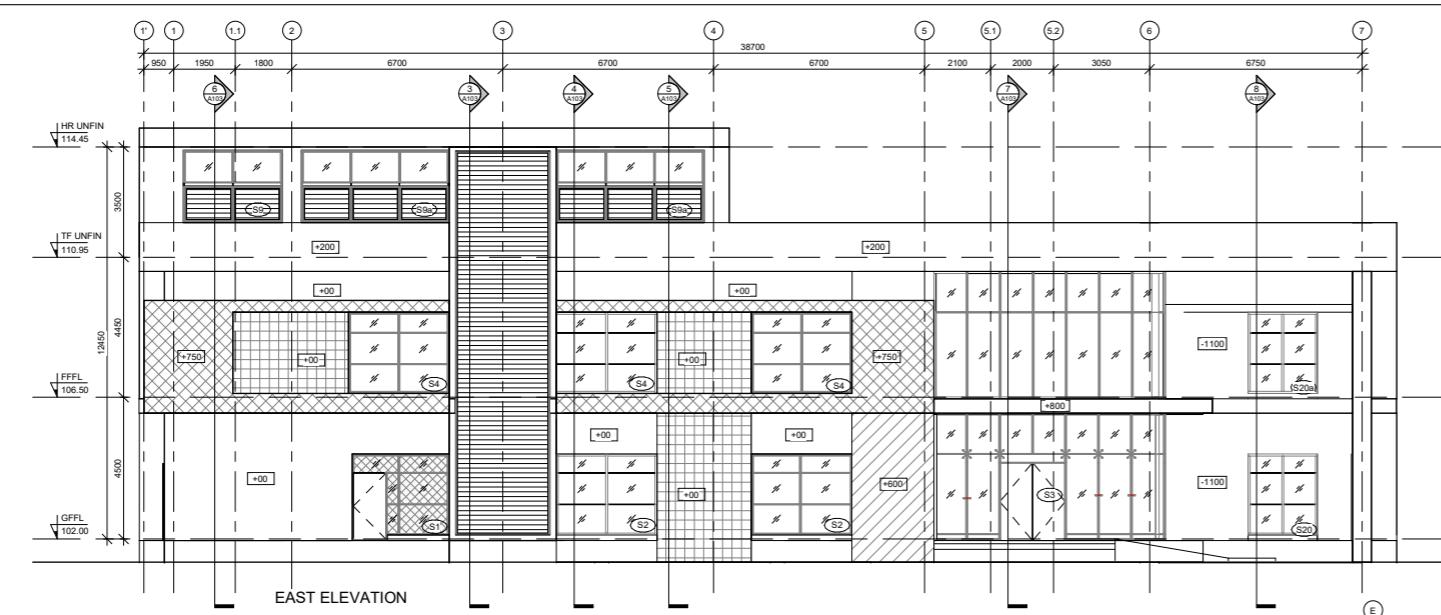
WORK CONTRIBUTION:

- 1) Created a ground floor wall marking plan from modelled building in Revit (trial drawing).
 - 2) Set annotation sizes and styles for grids, dimensions.
 - 3) Made view template for Revit floor plans.
 - 4) Made custom parametric families for doors, door tags, glazing tags.
 - 5) Made A1 portrait titleblock having sheet and project parameters, as well as revision schedule.

SOFTWARE USED:

- ## 1) Revit



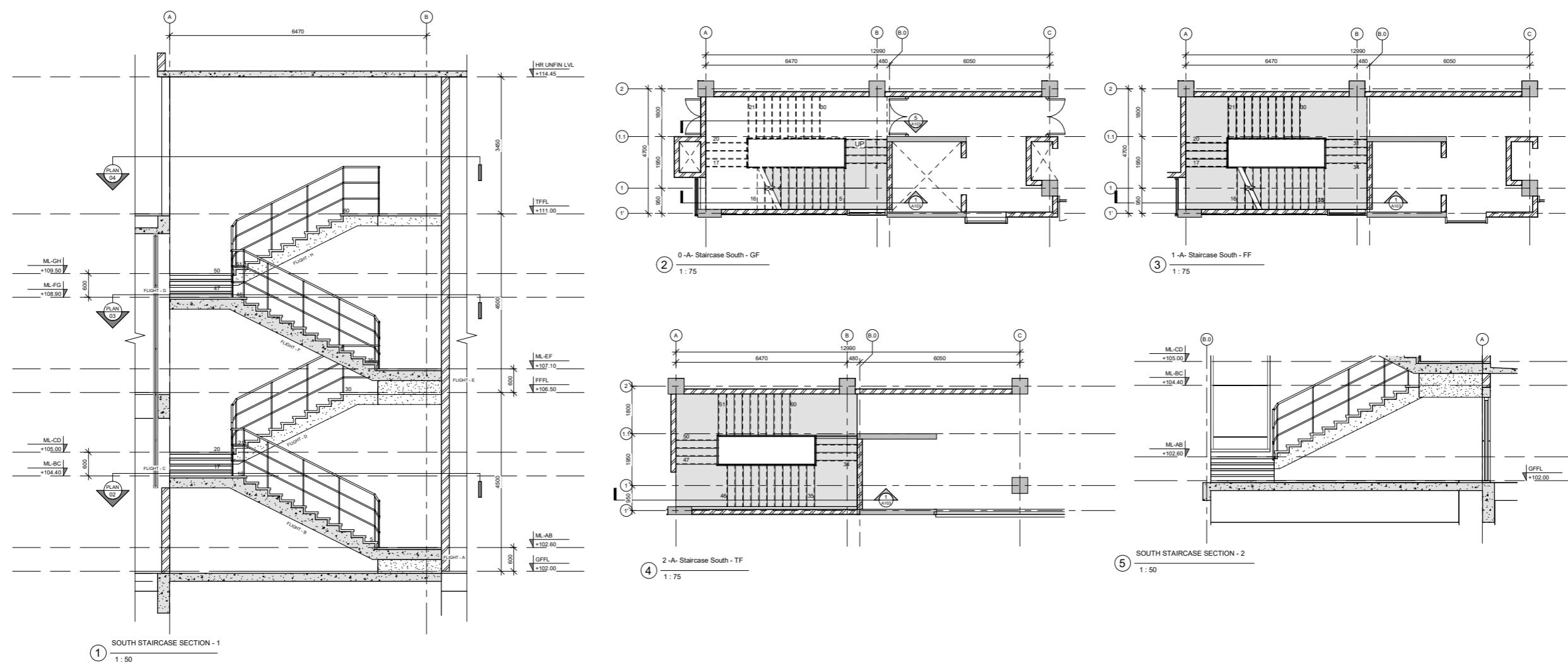


WORK CONTRIBUTION:

- 1) Made an elevation and chord sections sheet in Revit (for trial).
 - 2) Made Revit famalies such as a level annotation symbol, glass panel family, an angled mullion profile for louvers.

SOFTWARE USED:

- ## 1) Revit



NOTES:	
1.	ALL DIMENSIONS ARE IN (mm)
2.	DOORS AND WINDOWS ARE NOT TO SCALE
3.	ANY DISCREPANCY SHOULD BE TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS.
4.	GOOD FOR CONSTRUCTION VALID SUBJECT TO APPROPRIATE STATUTORY APPROVALS.
5.	OPENINGS FOR ALL EQUIPMENT SHALL BE AS PER DETAILED DRAWINGS.
6.	MASONRY WALLS AROUND OPENINGS OF LIFT AND HOIST SHALL BE BUILT AS PER VENDOR DETAILS.
7.	CLEAR OPENING SIZES FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWING.

REVISIONS		PURPOSE:
R2	25-03-24	Dummy Text - Door detail unclear, make it clear.
		Roofline angles inconsistent, adjust.
R1	20-03-24	Dummy Text - Door detail unclear, make it clear.
		Roofline angles inconsistent, adjust.
R0	19-03-24	Dummy Text - Scale is off, fix it. Windows need repositioning for symmetry.
REV. NO.	DATE	DESCRIPTION

PROJECT:	
PROJECT:	SCL - KNOWLEDGE CENTER - HYD
CLIENT:	SCL SAURAV CHEMICALS LTD.
CONSULTANT:	
ARCHITECT:	

TITLE:	
STAIRCASE DETAIL	
PROJECT NO.:	DRAWING NO.: SCL-xy2123
2401	TYPE: ARCHITECTURAL

SCALE:	DEALT BY:
As indicated	POORNIMA

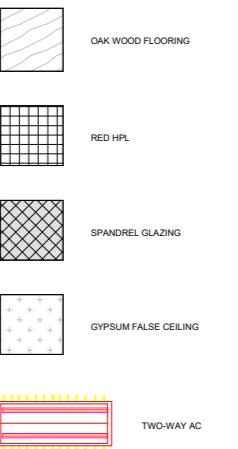
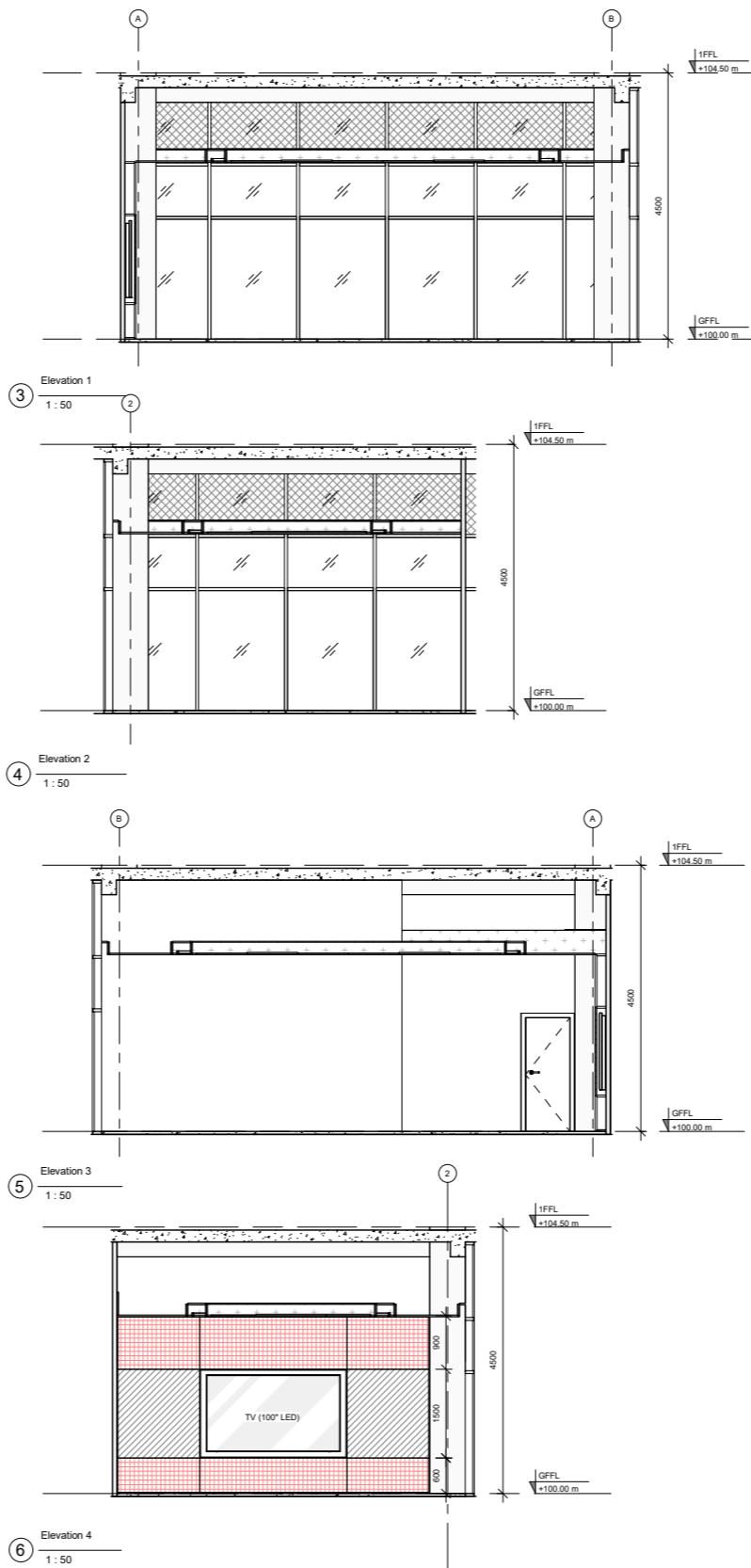
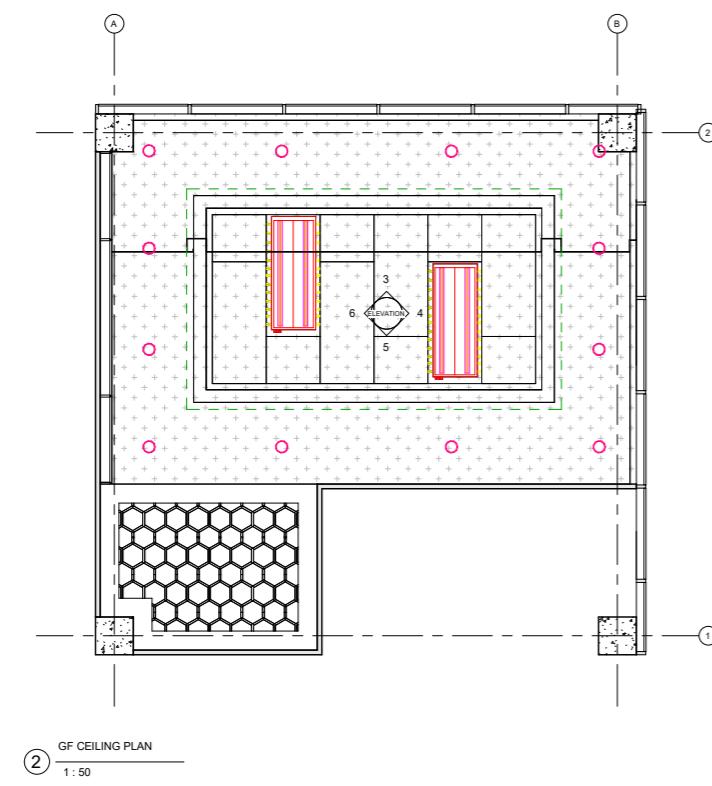
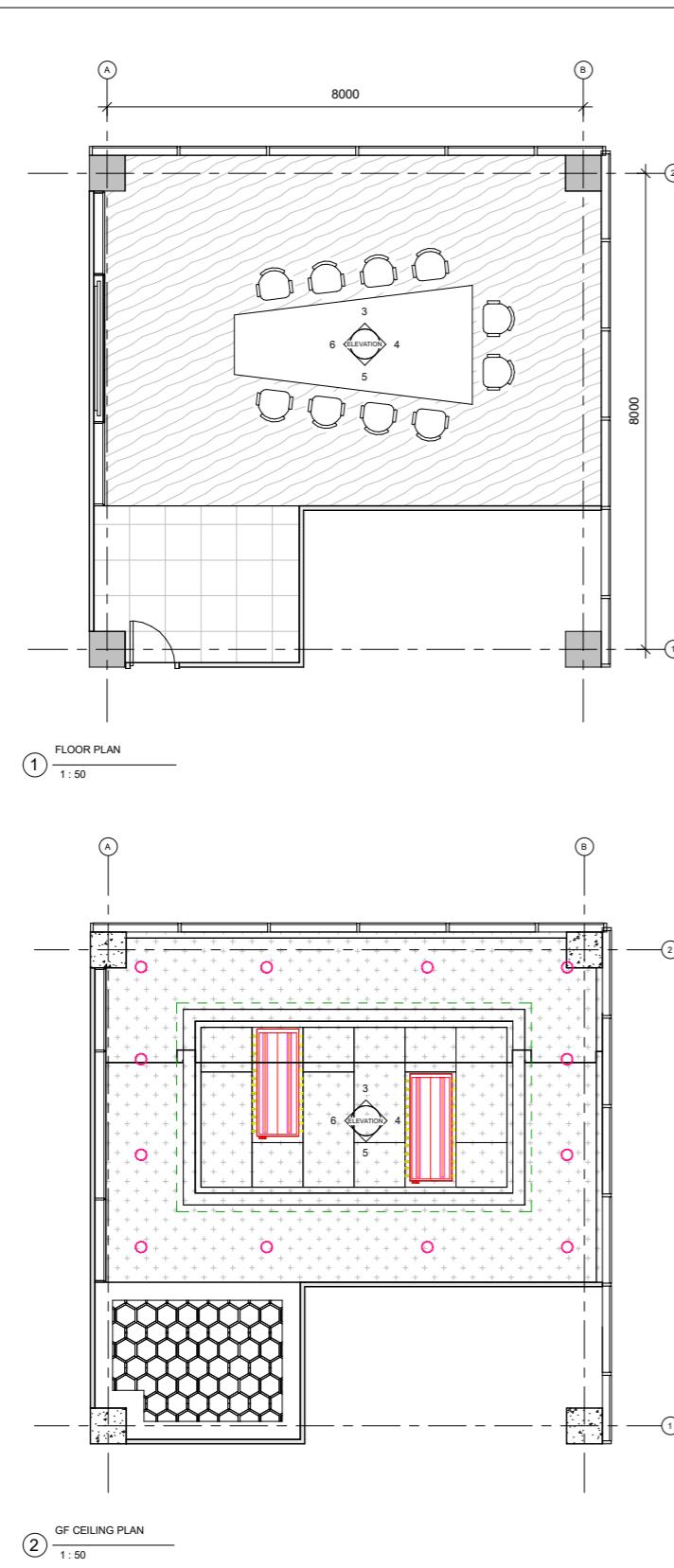
DRAWN BY:
VARUN

WORK CONTRIBUTION:

- 1) Made a staircase detail sheet in Revit (for trial)
- 2) Set a view template for staircase plan and sections
- 3) Made plan/horizontal section symbol from a 'level family' template.

SOFTWARE USED:

- 1) Revit



NOTES:

1. ALL DIMENSIONS ARE IN (mm).
2. 3. ANY DISCREPANCY SHOULD BE TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS.
4. GOOD FOR CONSTRUCTION VALIDITY SUBJECT TO APPROPRIATE STATUTORY APPROVALS.
5. OPENING FOR ALL EQUIPMENT SHALL BE AS PER DETAILED DRAWINGS.
6. MASONRY WALLS AROUND OPENINGS OF LIFT AND HOIST SHALL BE BUILT AS PER VENDOR DETAILS.
7. CLEAR OPENING SIZES FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWING.

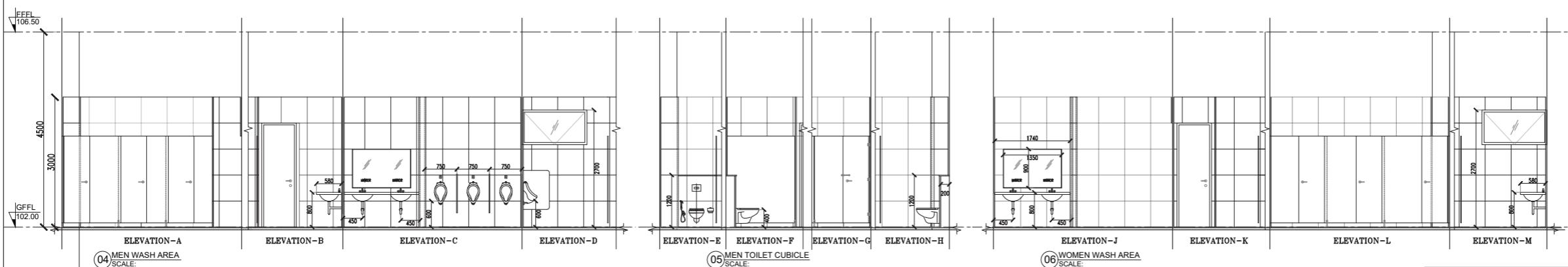
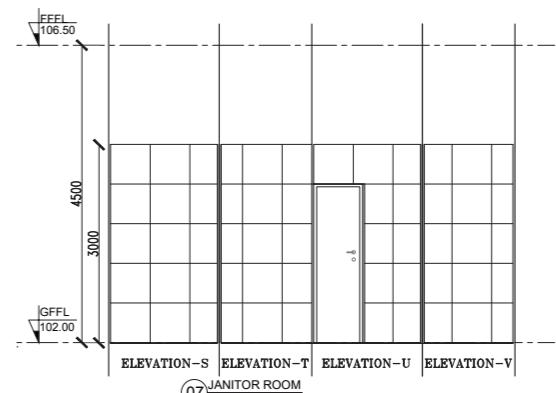
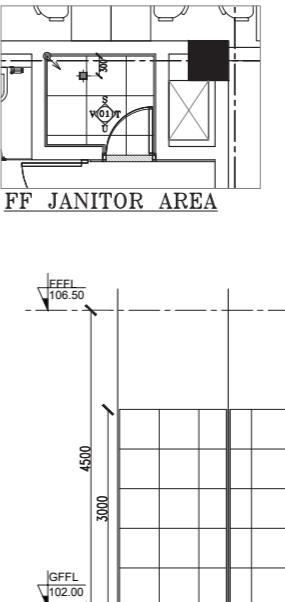
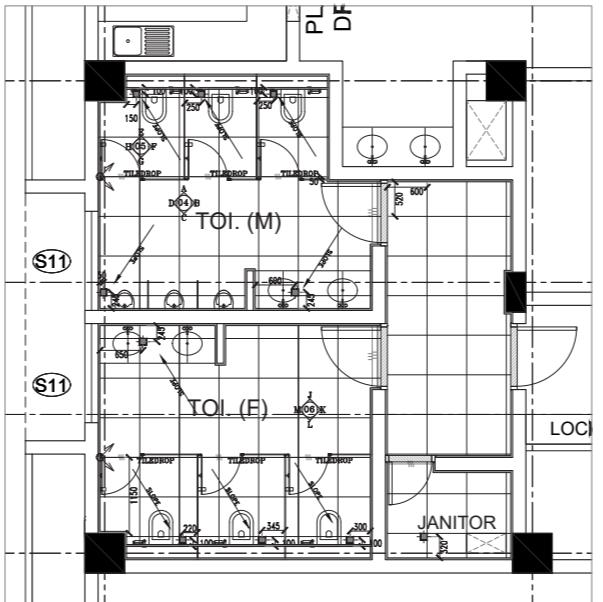
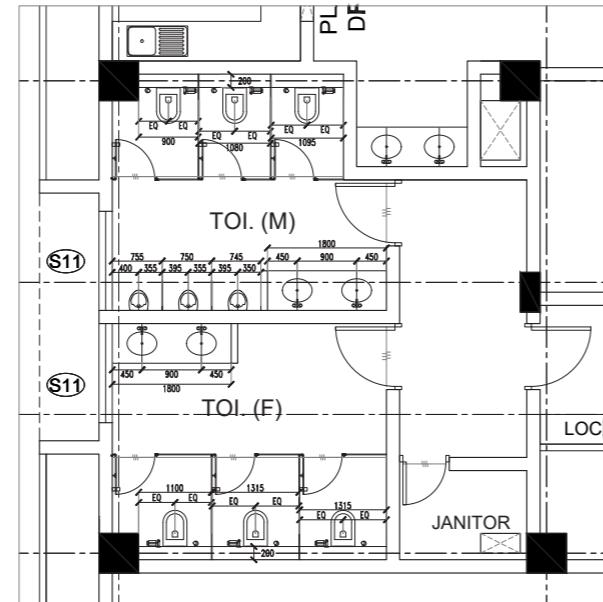
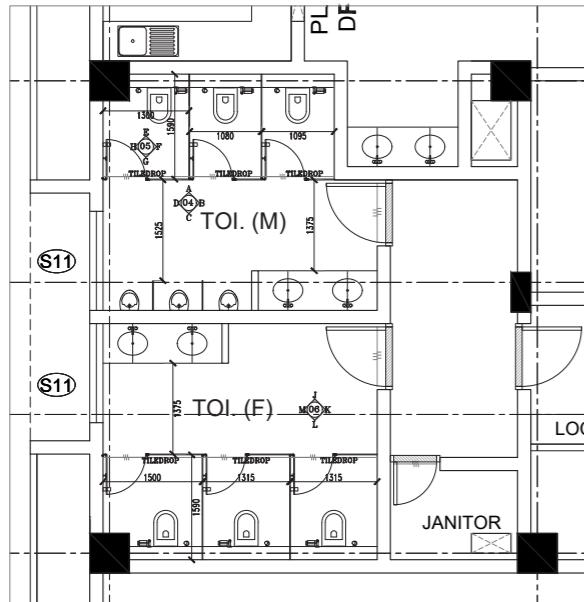
REVISIONS			PURPOSE:
			PROJECT: Project Name
			CLIENT:
			TITLE: BOARDROOM DETAILS
			CONSULTANT:
			PROJECT NO.: XXXX DRAWING NO.: xyz-A-1234
			TYPE: ARCHITECTURAL
			SCALE: 1 : 50 DEALT BY: Checker
			DRAWN BY: VARUN

WORK CONTRIBUTION:

- 1) Made a room details sheet for a boardroom - layout plan, reflected ceiling plan, and 4 sectional elevations (trial drawing).
- 2) Made ceiling AC family in curtain roof panel family template.
- 3) Made few types of open false ceiling families - hexagonal honeycomb, rectangular baffles, curved baffles.

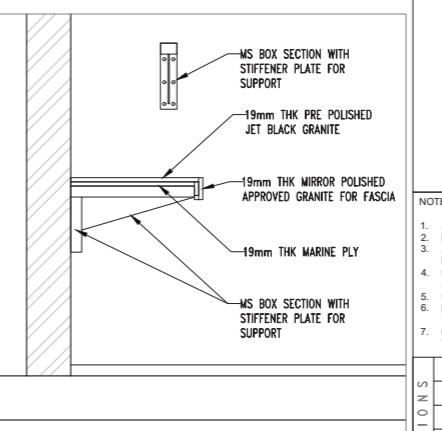
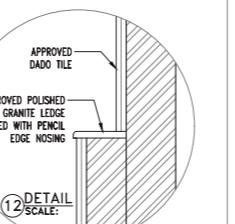
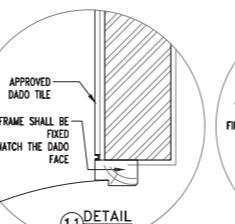
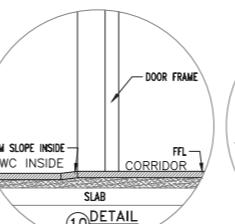
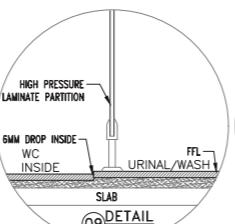
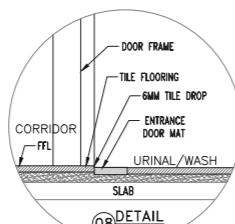
SOFTWARE USED:

- 1) Revit



SPECIAL NOTES:

- TILE SIZE CONSIDERED IS 600(w)x600(h).
- TLING ON WALL (DADO) SHALL START FROM TOP, BUT WITH NECESSARY ALLOWANCE (USUALLY CONSIDERED UPTO 50MM) FOR FLOOR SLOPE AND TILE DROP TILL THE LOWEST POINT IN THE TOILET.
- WATER PROOFING OF TOILET TO FOLLOW AS PER SPECIFICATIONS.
- ALL WATER, SANITARY AND ELECTRICAL POINTS AND LINES SHALL BE COMPLETE BEFORE DADO WORKS.
- FLOOR TILE SHALL BE MARKED ON RAW FLOOR BEFORE LAYING DRAIN POINTS AND DRAIN PIPES.
- DRAIN NAHNI TRAP SHALL BE LOCATED SUCH THAT MINIMAL TILES ARE CUT WHILE LAYING.
- NAHNI TRAP OUTER SHALL BE SQUARE OR RECTANGULAR AS SPECIFIED.
- THE FLUSH BUTTON NEEDS TO BE PLACED AT HEIGHT AFTER THE CLEAR HEIGHT OF THE FLAP OF THE WC.
- 2MM SPACER SHALL BE USED FOR DADO & FLOORING.
- ALL THE CORNERS SHALL HAVE CORNER EDGE BEADING.
- ALL THE JOINTS SHALL BE GROUTED WITH NYK LATICRETE OR EQUIVALENT.
- TLING ON WALL (DADO) SHALL START FROM TOP, BUT WITH NECESSARY ALLOWANCE (USUALLY CONSIDERED UPTO 50MM) FOR FLOOR SLOPE AND TILE DROP TILL THE LOWEST POINT IN THE TOILET WATER PROOFING OF TOILET TO FOLLOW AS PER SPECIFICATIONS.
- ALL WATER, SANITARY AND ELECTRICAL POINTS AND LINES SHALL BE COMPLETE BEFORE DADO WORKS.
- FLOOR TILE SHALL BE MARKED ON RAW FLOOR BEFORE LAYING DRAIN POINTS AND DRAIN PIPES.
- DRAIN NAHNI TRAP SHALL BE LOCATED SUCH THAT MINIMAL TILES ARE CUT WHILE LAYING.
- NAHNI TRAP OUTER SHALL BE SQUARE OR RECTANGULAR AS SPECIFIED.
- WC SHALL BE WALL MOUNTED.
- URINAL SHALL BE REAR SPOUT WITH INPUT LINE EMBEDDED INSIDE THE WALL.



NOTES	
1. ALL DIMENSIONS ARE IN MILLIMETERS (mm)	
2. DO NOT MEASURE DRAWING, FOLLOW WRITTEN DIMENSIONS	
3. ANY DISCREPANCY SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS	
4. COPIED CONSTRUCTION VALID SUBJECT TO APPROPRIATE STATUTORY APPROVALS	
5. OPENINGS FOR ALL EQUIPMENT SHALL BE AS PER DETAILED DRAWINGS	
6. MASONRY WALLS AROUND OPENINGS OF LIFT AND HOIST SHALL BE BUILT AS PER VENDOR DETAILS	
7. CLEAR OPENING SIZES FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWING.	

PURPOSE:

REV. NO.	DATE	DESCRIPTION
R0	30-01-2024	GOOD FOR CONSTRUCTION

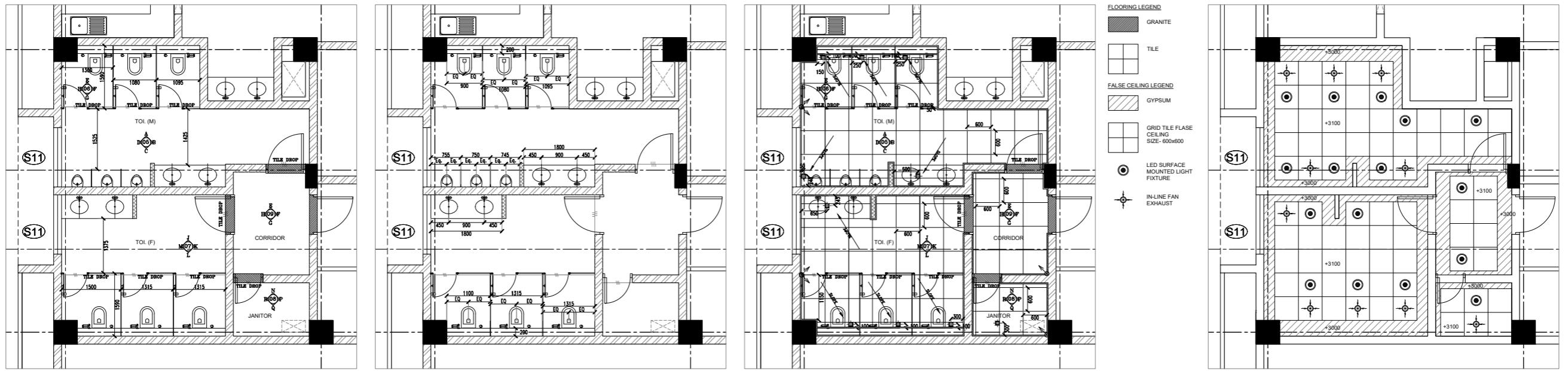
TITLE:	
TYPICAL TOILET DETAILS	
DRAWING NO.: SCL-A-6001	SCALE: 1:50
TYPE: ARCHITECTURAL	DEALT BY: KRUTHIKA POORNIMA R
PROJECT NO.: 2401	DRAWN BY: POORNIMA R
PROJECT: SCL-KNOWLEDGE CENTER- HYD.	ARCHITECT: studio ARCHNOVATE
	INNOVATION IN ARCHITECTURE

WORK CONTRIBUTION:

- Drafted typical toilet details elevations.

SOFTWARE USED:

- AutoCAD

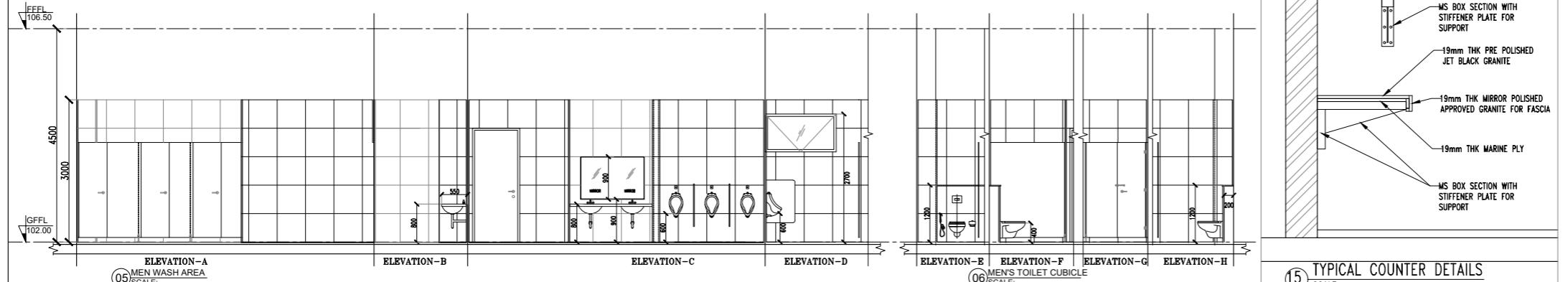


01 GF TOILET - LAYOUT PLAN
SCALE:

02 GF TOILET - FIXTURE MARKING
SCALE:

03 GF TOILET - FLOORING LAYOUT
SCALE:

04 GF TOILET - FALSE CEILING LAYOUT
SCALE:



ELEVATION-A
MEN WASH AREA
SCALE:

ELEVATION-B

ELEVATION-C

ELEVATION-D

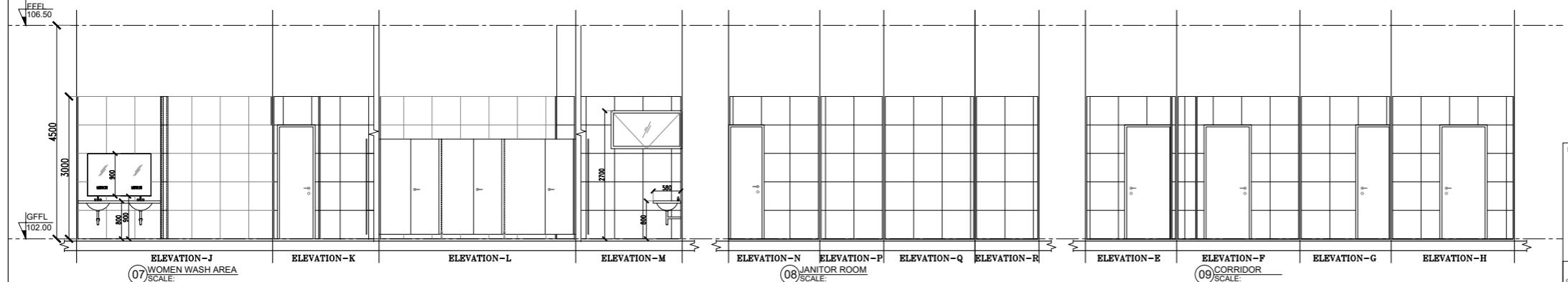
ELEVATION-E
MEN'S TOILET CUBICLE
SCALE:

ELEVATION-F

ELEVATION-G

ELEVATION-H

15 TYPICAL COUNTER DETAILS
SCALE:



ELEVATION-J
WOMEN WASH AREA
SCALE:

ELEVATION-K

ELEVATION-L

ELEVATION-M
JANITOR ROOM
SCALE:

ELEVATION-N

ELEVATION-P

ELEVATION-Q

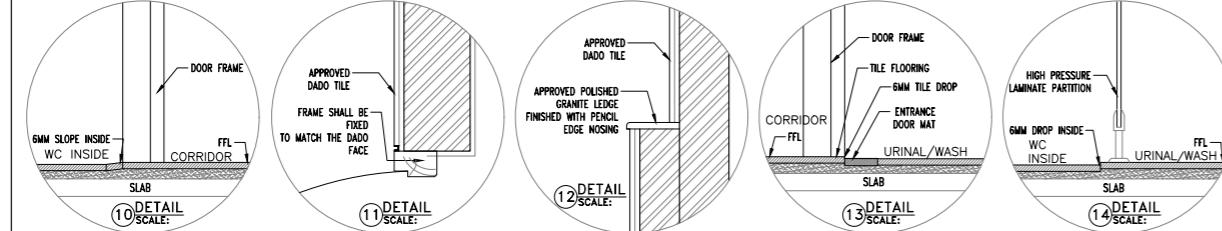
ELEVATION-R

ELEVATION-E
CORRIDOR
SCALE:

ELEVATION-F

ELEVATION-G

ELEVATION-H



10 DETAIL
SCALE:

11 DETAIL
SCALE:

12 DETAIL
SCALE:

13 DETAIL
SCALE:

14 DETAIL
SCALE:

SPECIAL NOTES:

- TILE SIZE CONSIDERED IS 600(W)X600(H).
- TILING ON WALL (DADO) SHALL START FROM TOP, BUT WITH NECESSARY ALLOWANCE (USUALLY CONSIDERED UPTO 50MM) FOR FLOOR SLOPE AND TILE DROP TILL THE LOWEST POINT IN THE TOILET.
- WATER PROOFING OF TOILET TO FOLLOW AS PER SPECIFICATIONS.
- ALL WATER, SANITARY AND ELECTRICAL POINTS AND LINES SHALL BE COMPLETE BEFORE DADO WORKS.
- FLOOR TILE SHALL BE MARKED ON RAW FLOOR BEFORE LAYING DRAIN POINTS AND DRAIN PIPES.
- DRAIN MAHINI TRAP SHALL BE LOCATED SUCH THAT MINIMAL TILES ARE CUT WHILE LAYING.
- MAHINI TRAP OUTER SHALL BE SQUARE OR RECTANGULAR AS SPECIFIED.
- THE FLUSH BUTTON NEEDS TO BE PLACED AT HEIGHT AFTER THE CLEAR HEIGHT OF THE FLAP OF THE WC.
- 2MM SPACER SHALL BE USED FOR DADO & FLOORING.
- ALL THE CORNERS SHALL HAVE CORNER EDGE BEADING.
- ALL THE JOINTS SHALL BE GROUTED WITH NYK LATRECRETE OR EQUIVALENT.
- TILING ON WALL (DADO) SHALL START FROM TOP, BUT WITH NECESSARY ALLOWANCE (USUALLY CONSIDERED UPTO 50MM) FOR FLOOR SLOPE AND TILE DROP TILL THE LOWEST POINT IN THE TOILET WATER PROOFING OF TOILET TO FOLLOW AS PER SPECIFICATIONS.
- ALL WATER, SANITARY AND ELECTRICAL POINTS AND LINES SHALL BE COMPLETE BEFORE DADO WORKS.
- FLOOR TILE SHALL BE MARKED ON RAW FLOOR BEFORE LAYING DRAIN POINTS AND DRAIN PIPES.
- DRAIN MAHINI TRAP SHALL BE LOCATED SUCH THAT MINIMAL TILES ARE CUT WHILE LAYING.
- MAHINI TRAP OUTER SHALL BE SQUARE OR RECTANGULAR AS SPECIFIED.
- WC SHALL BE WALL MOUNTED.
- URINAL SHALL BE REAR SPOUT WITH INPUT LINE EMBEDDED INSIDE THE WALL.

NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS (mm)
- DO NOT MEASURE DRAWING, FOLLOW WRITTEN DIMENSIONS
- ANY DISCREPANCY SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS
- GOOD FOR CONSTRUCTION VALID SUBJECT TO APPROPRIATE STATUTORY APPROVALS
- OPENINGS FOR ALL EQUIPMENT SHALL BE AS PER DETAILED DRAWINGS.
- MASONRY WALLS AROUND OPENINGS OF LIFT AND HOIST SHALL BE BUILT AS PER VENDOR DETAILS
- CLEAR OPENING SIZES FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWING.

PURPOSE:

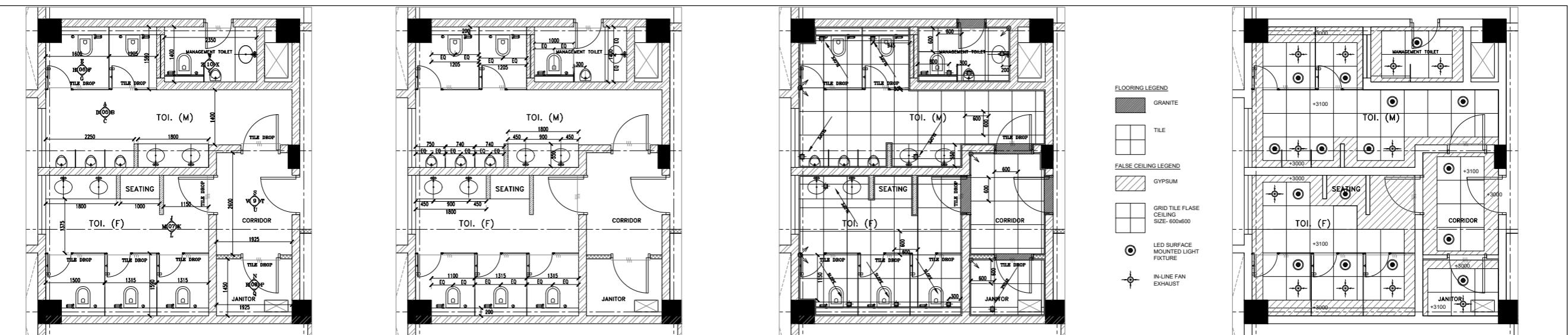
R1	18-04-2024	GOOD FOR CONSTRUCTION
R0	30-01-2024	GOOD FOR CONSTRUCTION
REV. NO. DATE DESCRIPTION		
TITLE: GROUND FLOOR TOILET DETAILS		
DRAWING NO.: SCL-A-6001	SCALE: 1:50	
TYPE: ARCHITECTURAL	DEALT BY: KRUTHIKA POORNIMA R	
PROJECT NO.: 2401	DRAWN BY: POORNIMA R	
PROJECT: SCL-KNOWLEDGE CENTER- HYD.	ARCHITECT: studio ARCHNOVATE	INNOVATION IN ARCHITECTURE

WORK CONTRIBUTION:

1) Drafted ground floor toilet details - all plans, elevations.

SOFTWARE USED:

1) AutoCAD



01 FF TOILET - LAYOUT PLAN

SCALE:

02 FF TOILET - FIXTURE MARKING

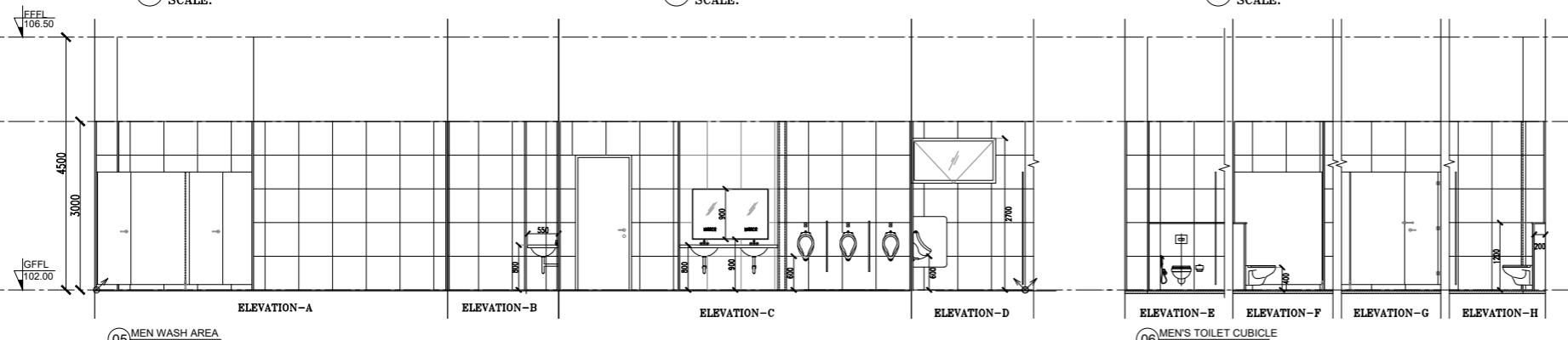
SCALE:

03 FF TOILET - FLOORING LAYOUT

SCALE:

04 FF TOILET - CEILING PLAN

SCALE:



05 MEN WASH AREA

SCALE:

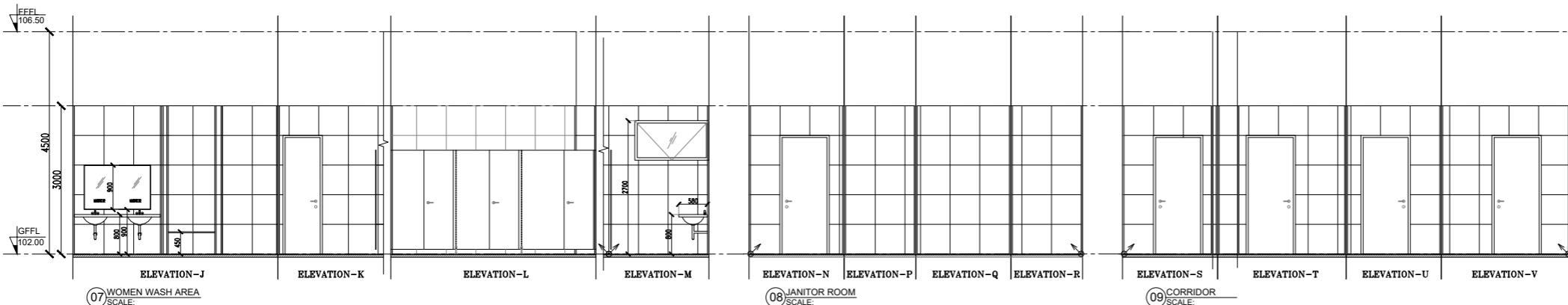
06 MEN'S TOILET CUBICLE

SCALE:

SPECIAL NOTES:

- TILE SIZE CONSIDERED IS 600(W)X600(H).
- TILING ON WALL (DADO) SHALL START FROM TOP, BUT WITH NECESSARY ALLOWANCE (USUALLY CONSIDERED UPTO 50MM) FOR FLOOR SLOPE AND TILE DROP TILL THE LOWEST POINT IN THE TOILET.
- WATER PROOFING OF TOILET TO FOLLOW AS PER SPECIFICATIONS.
- ALL WATER, SANITARY AND ELECTRICAL POINTS AND LINES SHALL BE COMPLETE BEFORE DADO WORKS.
- FLOOR TILE SHALL BE MARKED ON RAW FLOOR BEFORE LAYING DRAIN POINTS AND DRAIN PIPES.
- DRAIN NAHNI TRAP SHALL BE LOCATED SUCH THAT MINIMAL TILES ARE CUT WHILE LAYING.
- NAHNI TRAP OUTER SHALL BE SQUARE OR RECTANGULAR AS SPECIFIED.
- THE FLUSH BUTTON NEEDS TO BE PLACED AT HEIGHT AFTER THE CLEAR HEIGHT OF THE DOOR IS MET.
- 2MM SPACER SHALL BE USED FOR DADO & FLOORING.
- ALL THE CORNERS SHALL HAVE CORNER EDGE READINGS.
- ALL THE JOINTS SHALL BE GROUTED WITH MHC LATICRETE OR EQUIVALENT.
- TILING ON WALL (DADO) SHALL START FROM TOP, BUT WITH NECESSARY ALLOWANCE (USUALLY CONSIDERED UPTO 50MM) FOR FLOOR SLOPE AND TILE DROP TILL THE LOWEST POINT IN THE TOILET WATER PROOFING OF TOILET TO FOLLOW AS PER SPECIFICATIONS.
- ALL WATER, SANITARY AND ELECTRICAL POINTS AND LINES SHALL BE COMPLETE BEFORE DADO WORKS.
- FLOOR TILE SHALL BE MARKED ON RAW FLOOR BEFORE LAYING DRAIN POINTS AND DRAIN PIPES.
- DRAIN NAHNI TRAP SHALL BE LOCATED SUCH THAT MINIMAL TILES ARE CUT WHILE LAYING.
- NAHNI TRAP OUTER SHALL BE SQUARE OR RECTANGULAR AS SPECIFIED.
- WC SHALL BE WALL MOUNTED.
- URINAL SHALL BE REAR SPOUT WITH INPUT LINE EMBEDDED INSIDE THE WALL.

NOTES	
1. ALL DIMENSIONS ARE IN MILLIMETERS (mm)	
2. DO NOT MEASURE DRAWING, FOLLOW WRITTEN DIMENSIONS	
3. ANY DISCREPANCY SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS	
4. CONTRACT CONSTRUCTION VALID SUBJECT TO APPROPRIATE STATUTORY APPROVALS	
5. OPENINGS FOR ALL EQUIPMENT SHALL BE AS PER DETAILED DRAWINGS.	
6. MASONRY WALLS AROUND OPENINGS OF LIFT AND HOIST SHALL BE BUILT AS PER VENDOR DETAILS	
7. CLEAR OPENING SIZES FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWING.	



07 WOMEN WASH AREA

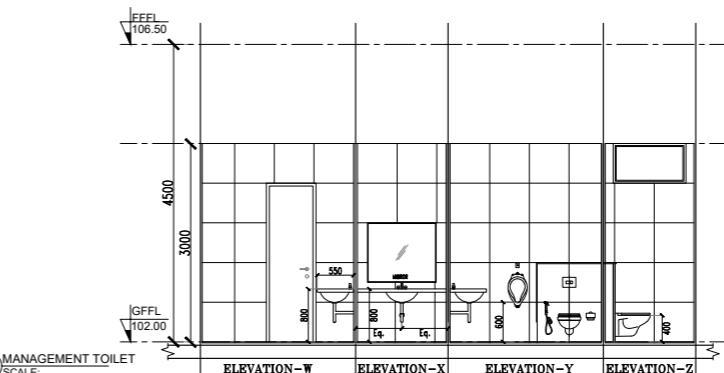
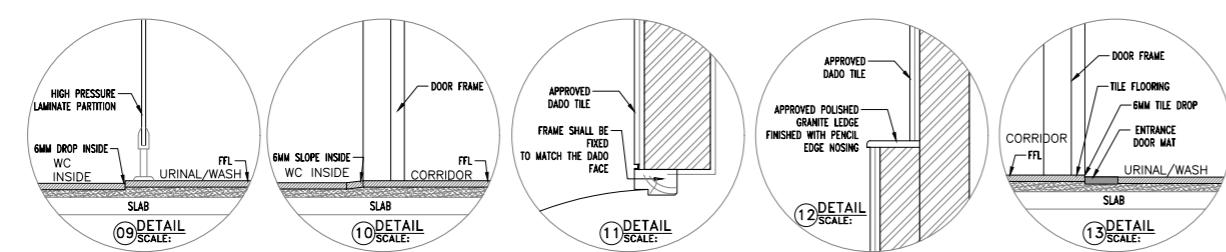
SCALE:

08 JANITOR ROOM

SCALE:

09 CORRIDOR

SCALE:



NOTES	
1. ALL DIMENSIONS ARE IN MILLIMETERS (mm)	
2. DO NOT MEASURE DRAWING, FOLLOW WRITTEN DIMENSIONS	
3. ANY DISCREPANCY SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS	
4. CONTRACT CONSTRUCTION VALID SUBJECT TO APPROPRIATE STATUTORY APPROVALS	
5. OPENINGS FOR ALL EQUIPMENT SHALL BE AS PER DETAILED DRAWINGS.	
6. MASONRY WALLS AROUND OPENINGS OF LIFT AND HOIST SHALL BE BUILT AS PER VENDOR DETAILS	
7. CLEAR OPENING SIZES FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWING.	

PURPOSE:

R1	19-04-2024	GOOD FOR CONSTRUCTION
R0	30-01-2024	GOOD FOR CONSTRUCTION

REV. NO.	DATE	DESCRIPTION

TITLE: FIRST FLOOR TOILET DETAILS		
DRAWING NO.: SCL-A-6002	SCALE: 1:50	
TYPE: ARCHITECTURAL		
PROJECT NO.: 2401	DEALT BY: KRUTHIKA VARUNSA	

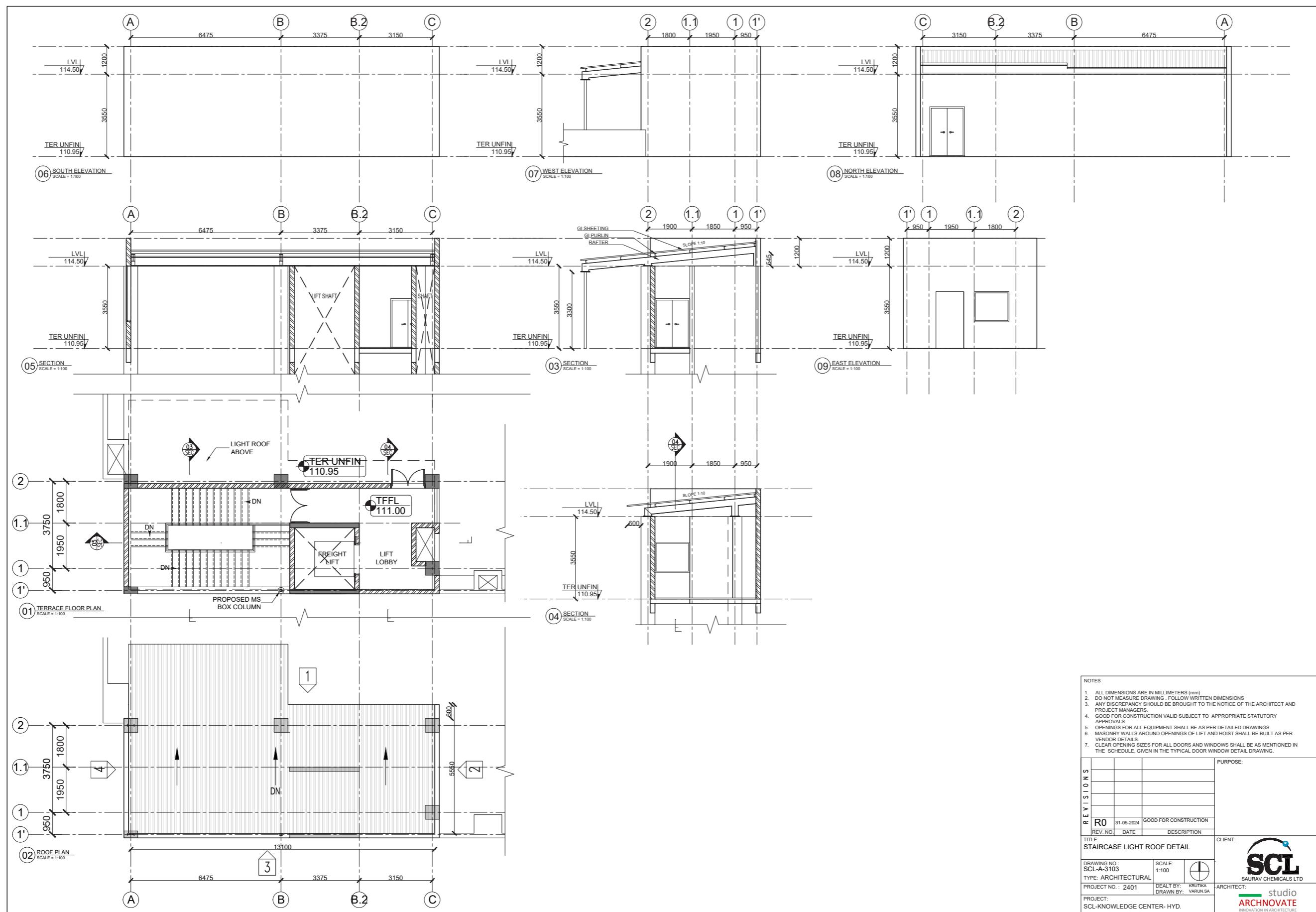
CLIENT: SCL SAURAV CHEMICALS LTD		
PROJECT: SCL-KNOWLEDGE CENTER-HYD	ARCHITECT: studio ARCHNOVATE	INNOVATION IN ARCHITECTURE

WORK CONTRIBUTION:

- Drafted first floor toilet details - all plans, elevations.
- Composed sheet.

SOFTWARE USED:

- AutoCAD



WORK CONTRIBUTION:

- 1) Made a detail drawing sheet for a light roof of a stairwell and mumty. (not used, design later revised)

SOFTWARE USED:

- ## 1) AutoCAD



WORK CONTRIBUTION:

- 1) Made latest updates to 3D model and took renders.

SOFTWARE USED:

- 1) Sketchup
- 2) Enscape



ANTHEM BIOSCIENCES - BUILDING CP7

Anthem Biosciences is a Contract Research and Innovation Service Provider (CRISP) based in Bangalore, India. They have a built-up capacity to house over 1000 researchers and manufacture novel commercial drug actives. Their focus areas include integrated drug discovery, process development, and scale-up. Anthem Biosciences Private Limited operates from its Harohalli Unit-II, which is situated on a 20-acre site in Harohalli, Bengaluru. This large-scale manufacturing facility focuses on fermentation and API synthesis for drug actives.

CLIENT: Anthem Biosciences

USAGE: Contract manufacturing through fermentation for API synthesis

LOCATION: Harohalli, Bengaluru

SIZE: 4 storeys, ~2,000 sq.m = ~21,000sqft

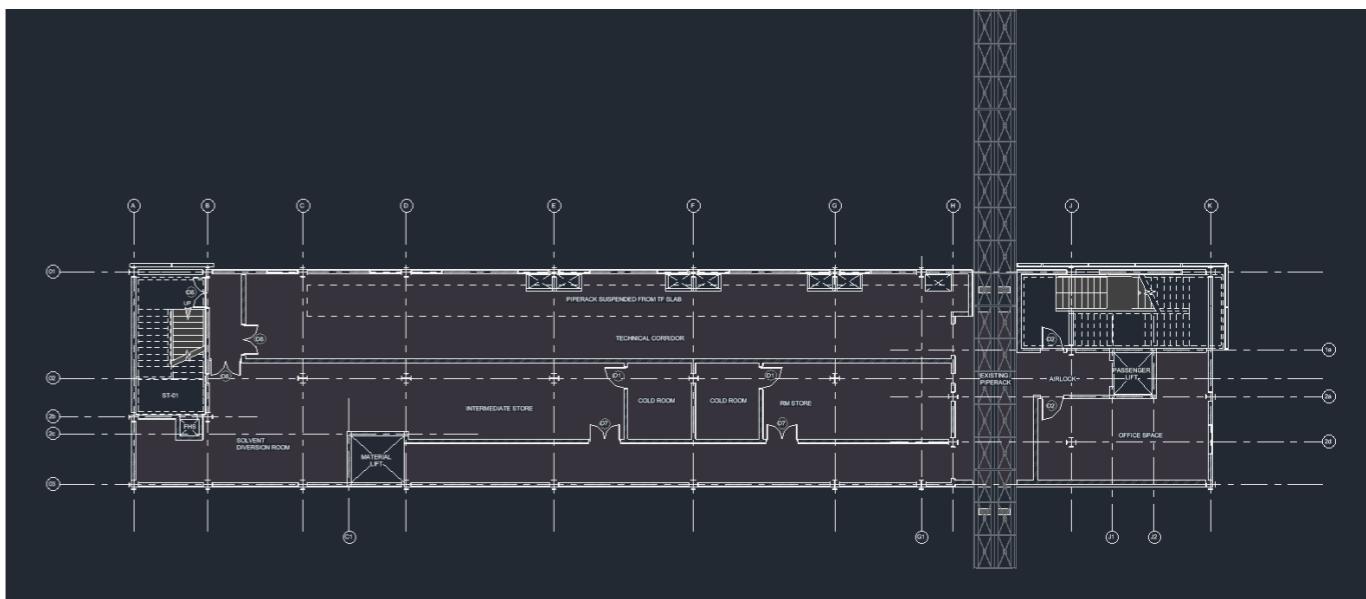
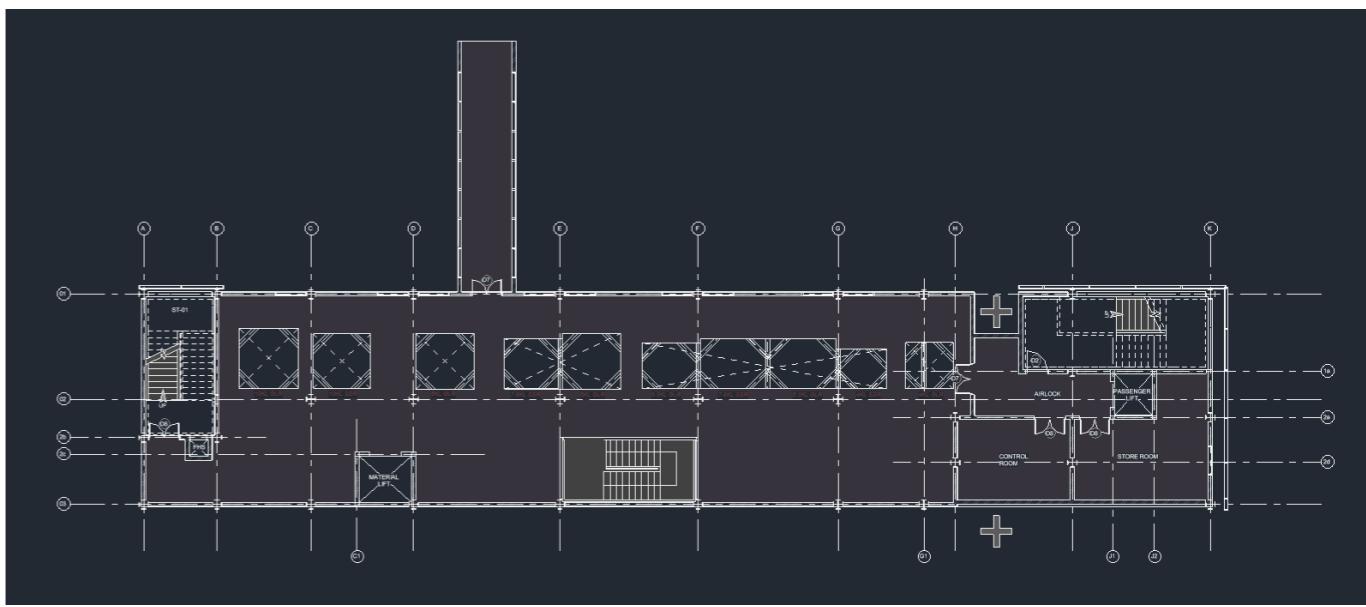
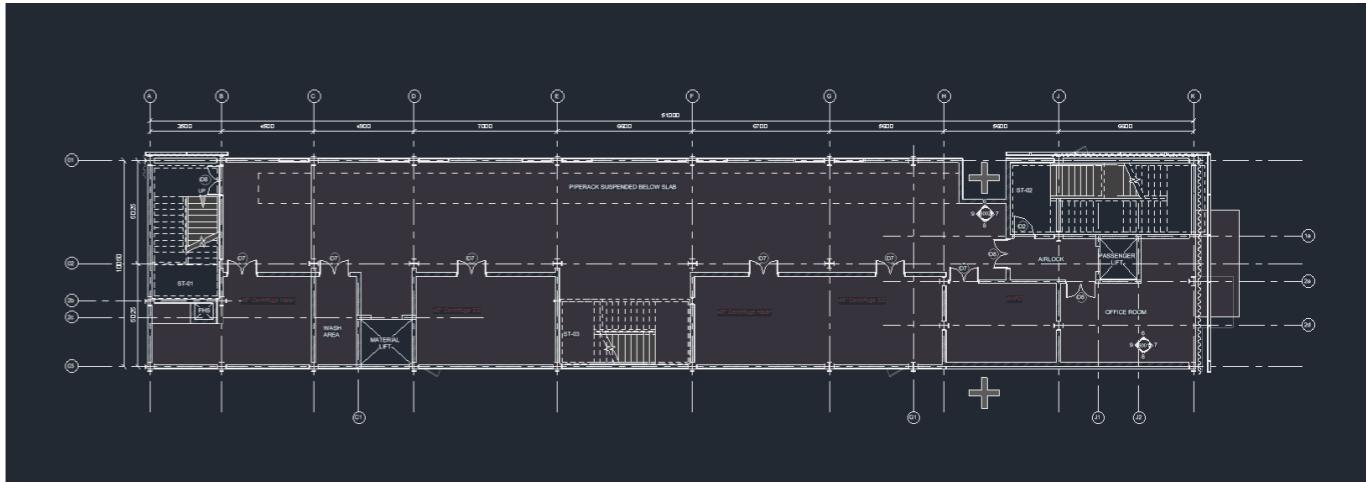
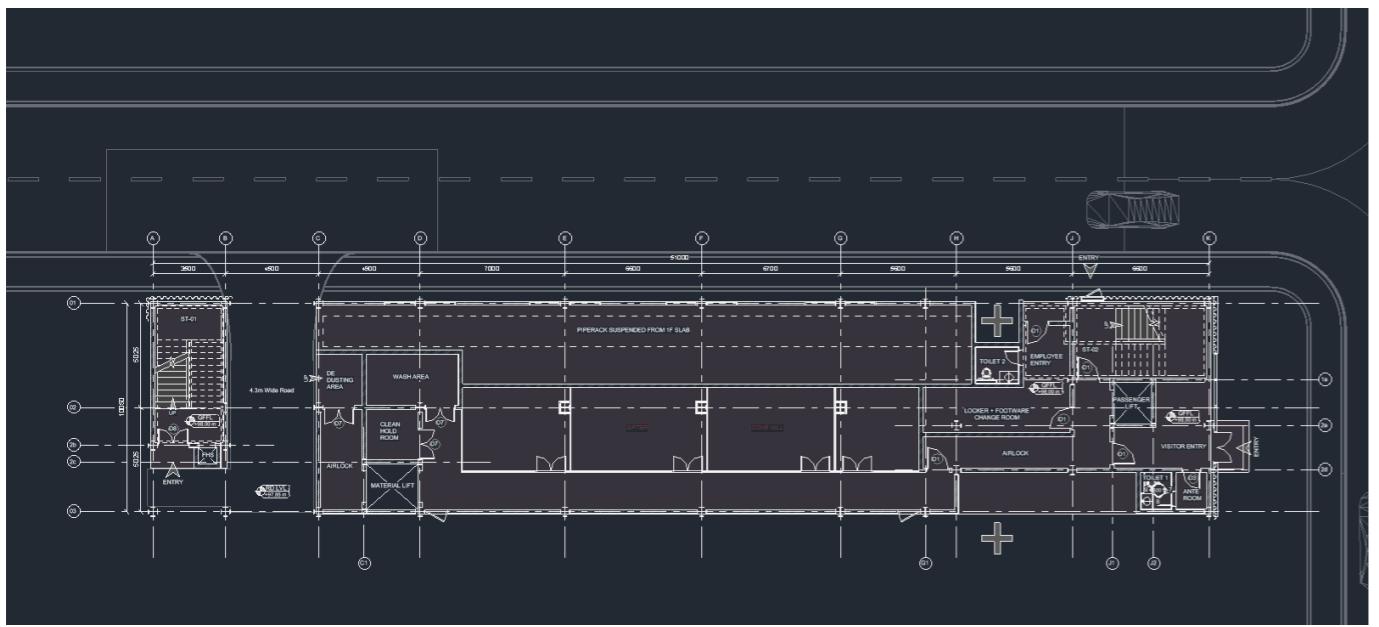
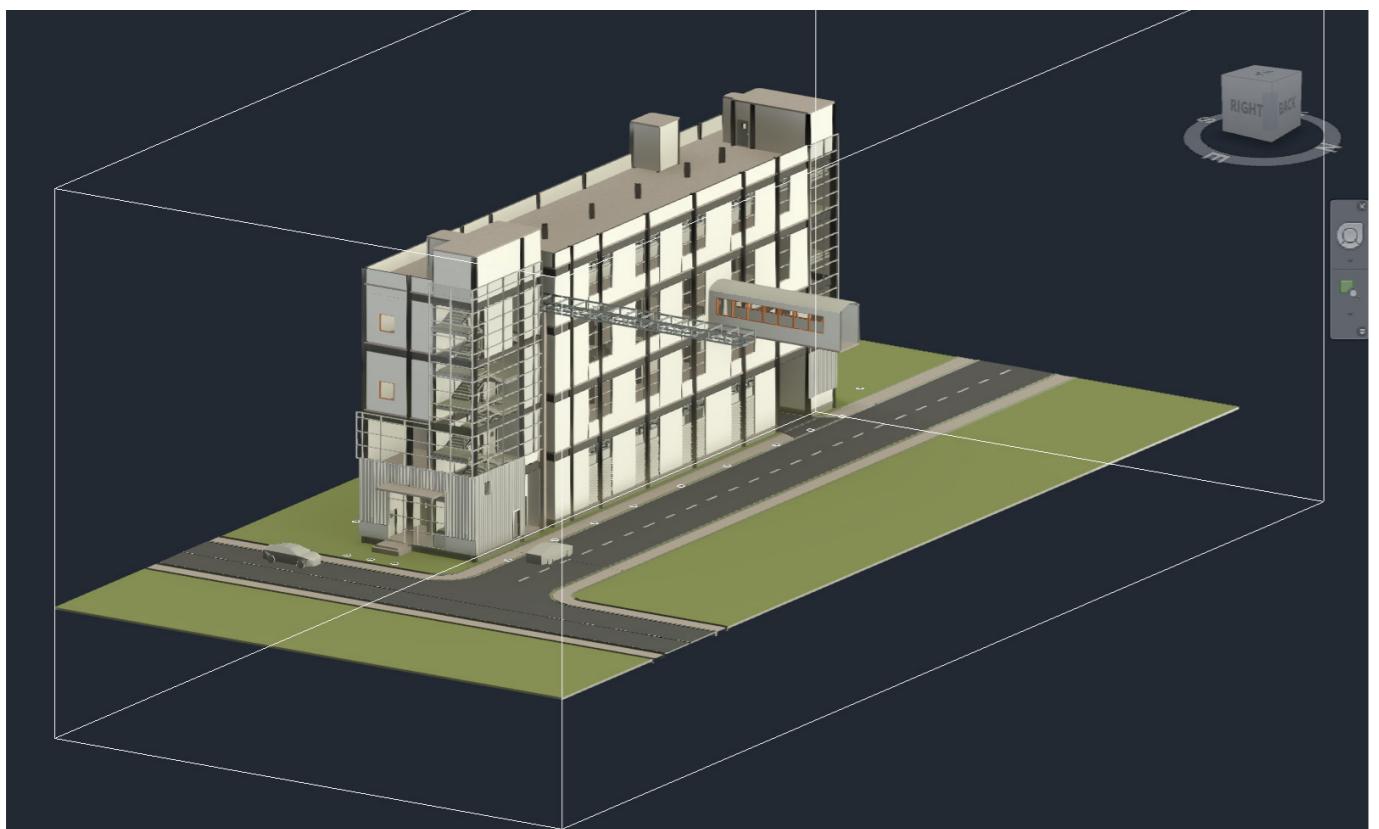
STAGE OF WORK: Under construction - Foundation footings built

SOFTWARE USED: AutoCAD, Revit, Sketchup, Enscape

WORK CONTRIBUTION:

- 1) Modelled building in Revit.
- 2) Image rendered through Sketchup and Enscape

CP7 - REVIT MODEL

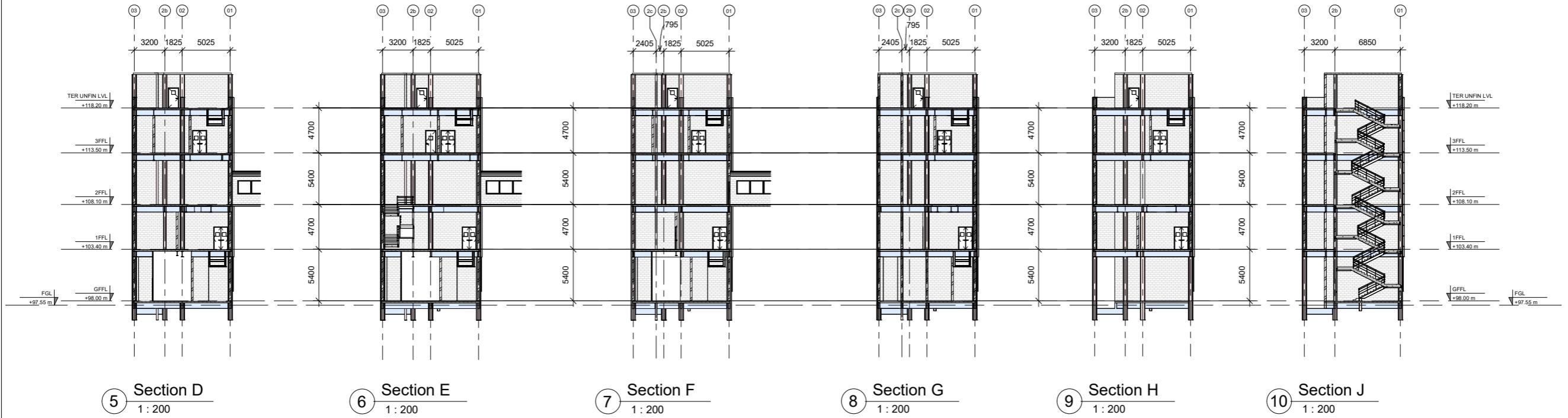
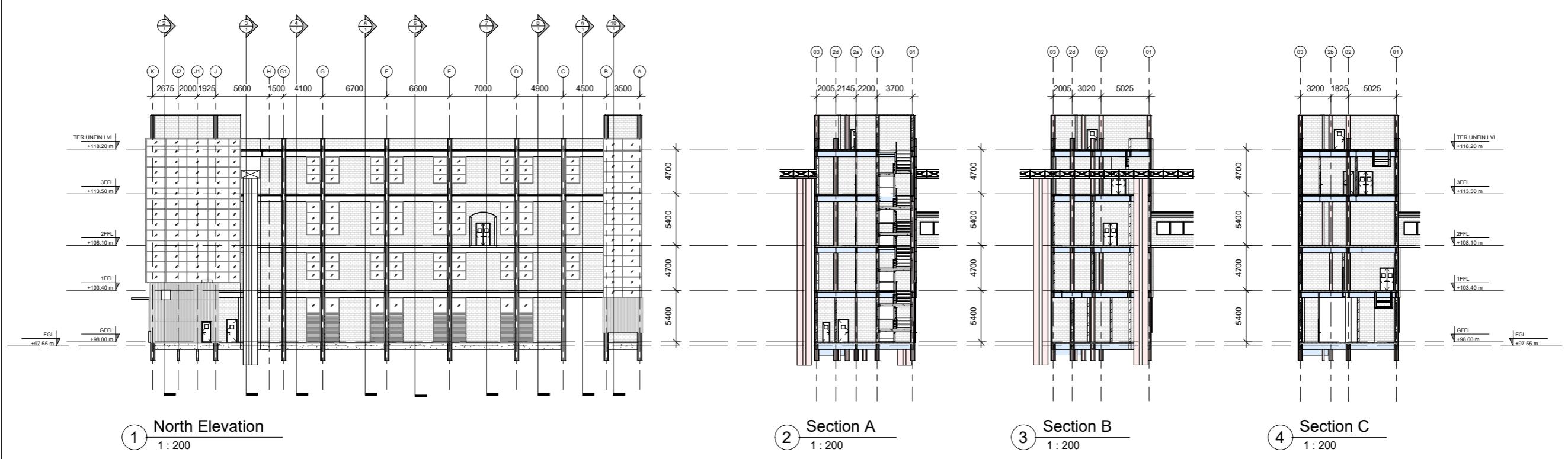


WORK CONTRIBUTION:

- Made Revit model of entire building, including structural and architectural elements and piperack locations for services.

SOFTWARE USED:

- Revit



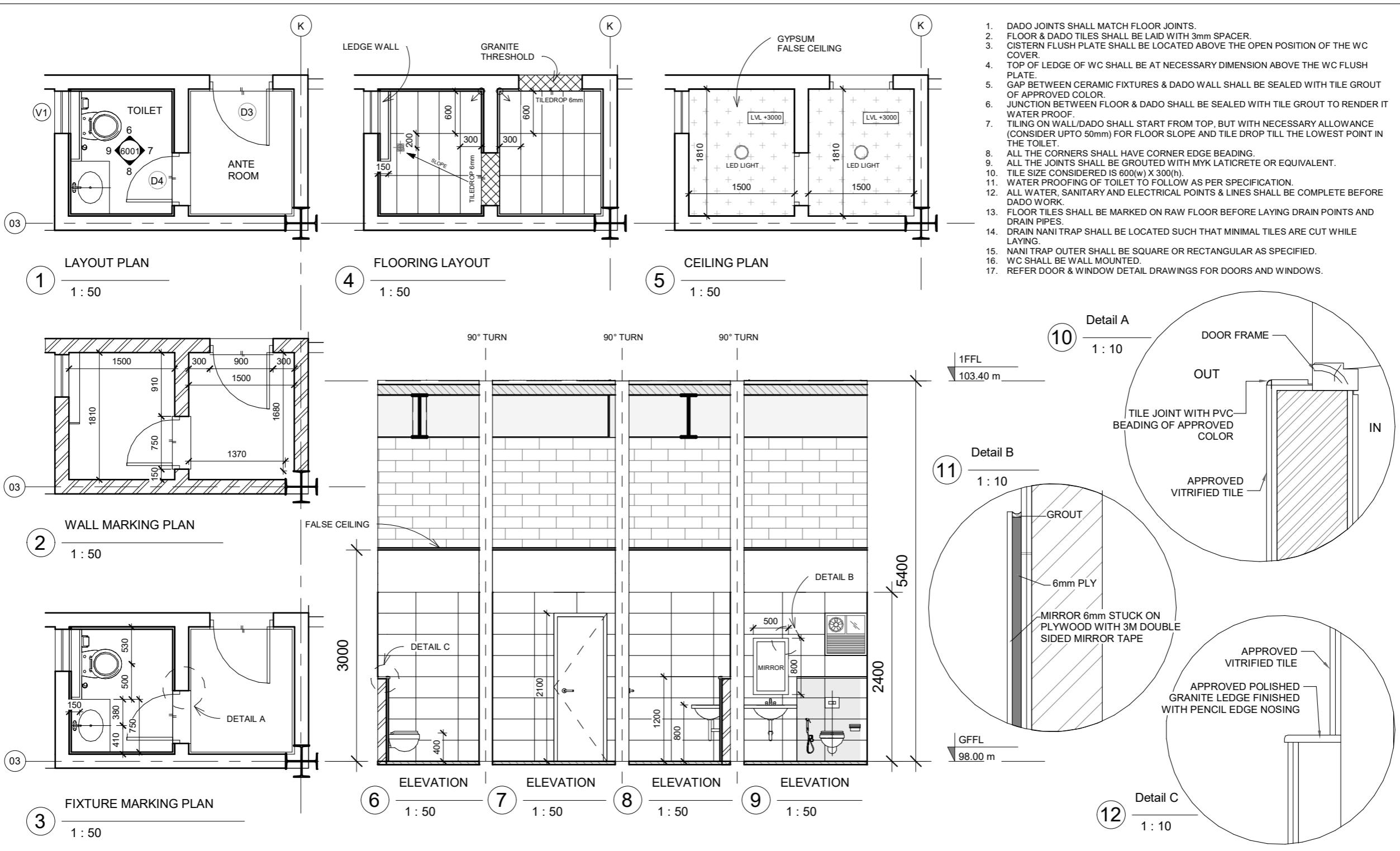
CP-7 SECTIONS FROM REVIT

WORK CONTRIBUTION:

- 1) Made North elevation and sections sheet in Revit.

SOFTWARE USED:

- 1) Revit



NOTES:

1. ALL DIMENSIONS ARE IN (mm).
2. DO NOT MEASURE DRAWING. FOLLOW WRITTEN DIMENSIONS.
3. ANY DISCREPANCY SHOULD BE TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS.
4. GOOD FOR CONSTRUCTION VALIDITY SUBJECT TO APPROPRIATE STATUTORY APPROVALS.
5. CLEAR OPENING SIZES FOR ALL DOORS AND WINDOWS SHALL BE AS MENTIONED IN THE SCHEDULE, GIVEN IN THE TYPICAL DOOR WINDOW DETAIL DRAWING.

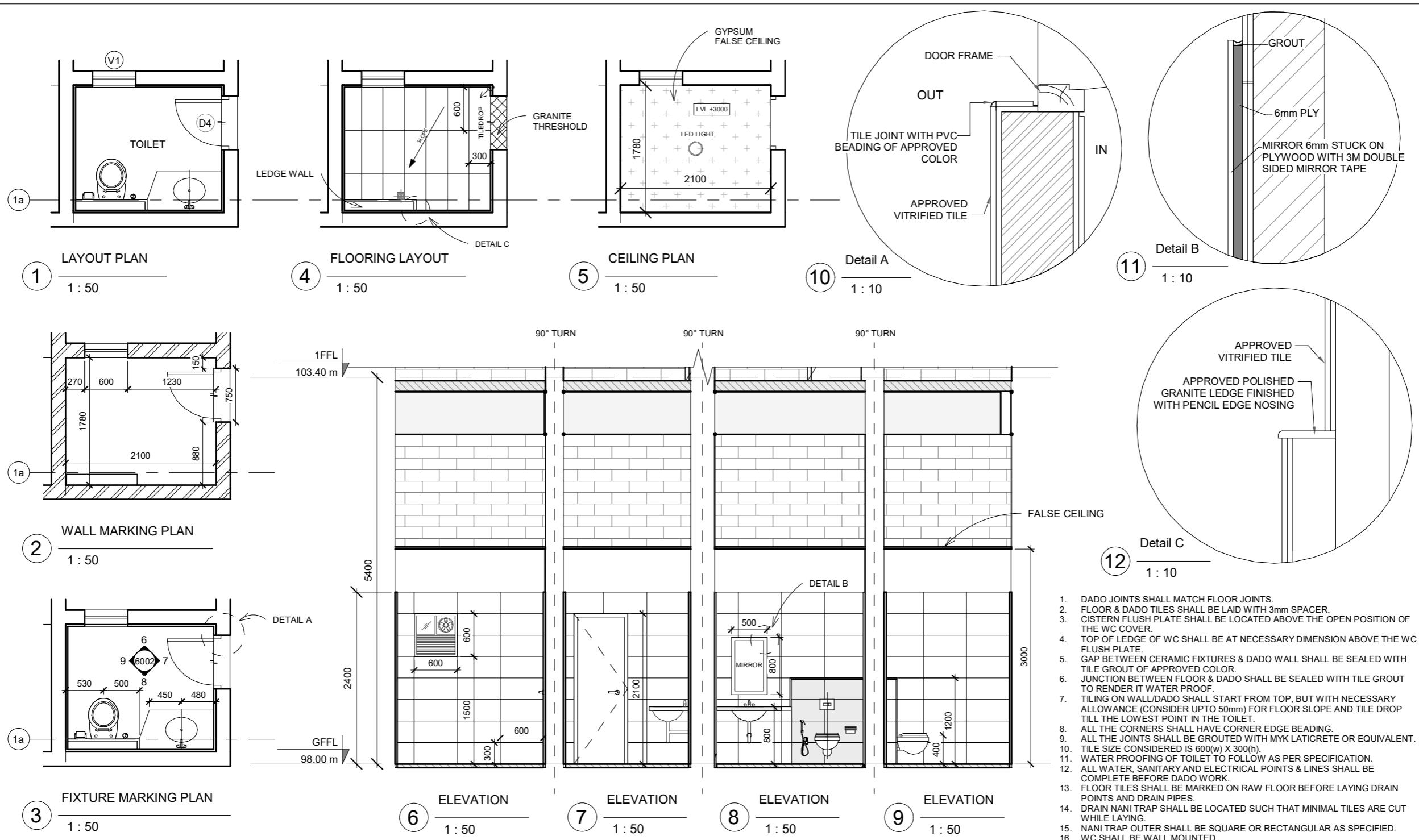
REVISIONS			DRAWING NO.: CP7-A-6001	SCALE: As indicated	ARCHITECT:	PURPOSE:
			TYPE: ARCHITECTURAL			
			PROJECT NO.: 2410	DEALT BY: VISHNU.R DRAWN BY: VARUN.SA		
			PROJECT: ANTHEM BIOSCIENCES - CP7		TITLE: TOILET-1 DETAILS	
R0	15-05-24	GOOD FOR CONSTRUCTION				CLIENT: Anthem Bio Sciences

WORK CONTRIBUTION:

- 1) Made Toilet-1 details sheet in Revit.

SOFTWARE USED:

- 1) Revit



WORK CONTRIBUTION:

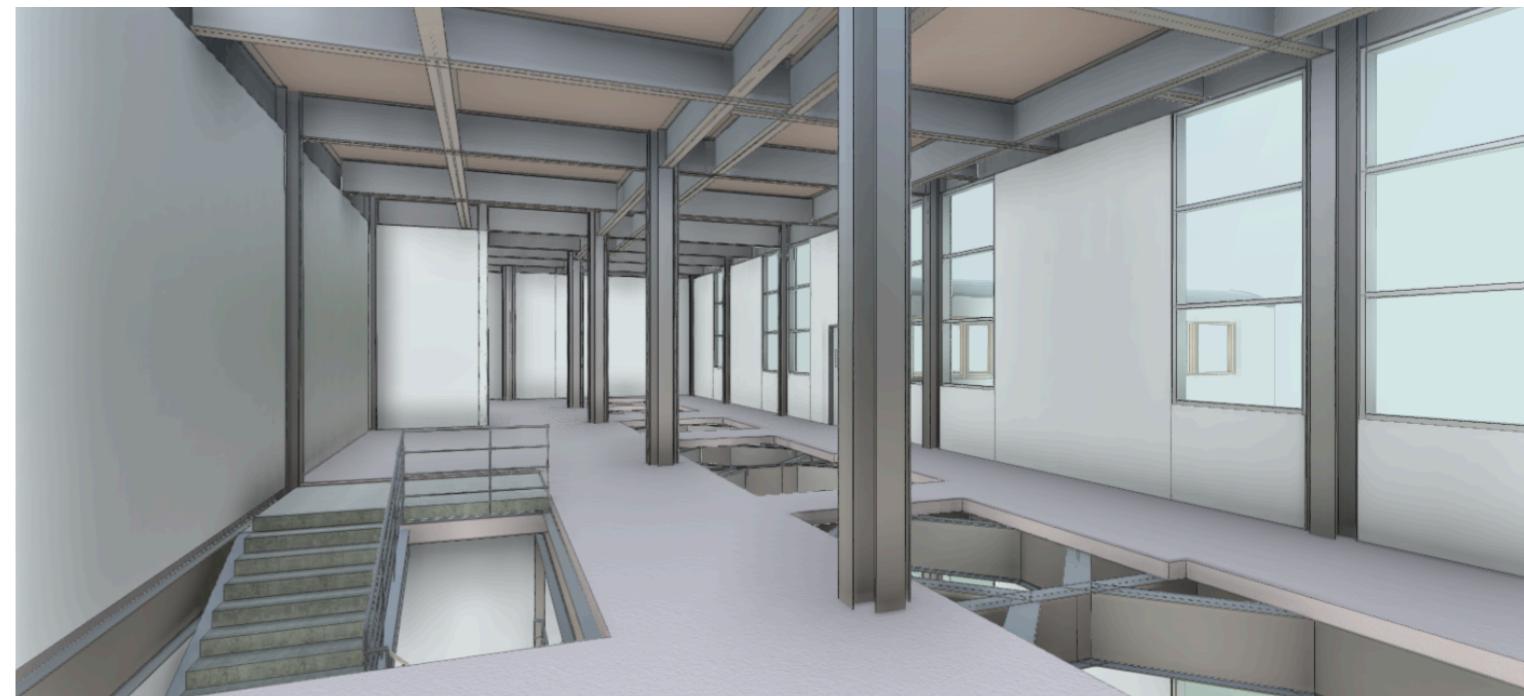
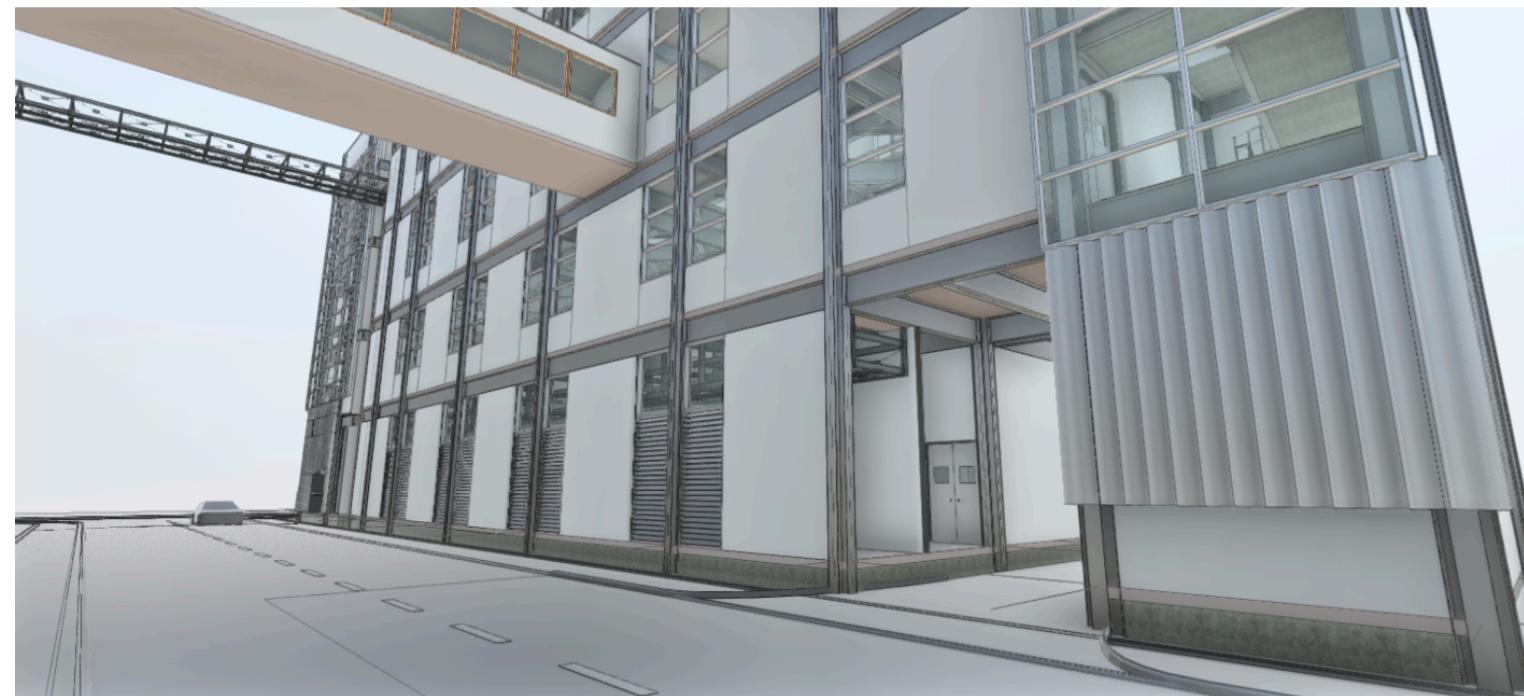
- Made Toilet-2 details sheet in Revit.

SOFTWARE USED:

- Revit



CP7 - WALKTHROUGH VIEWS



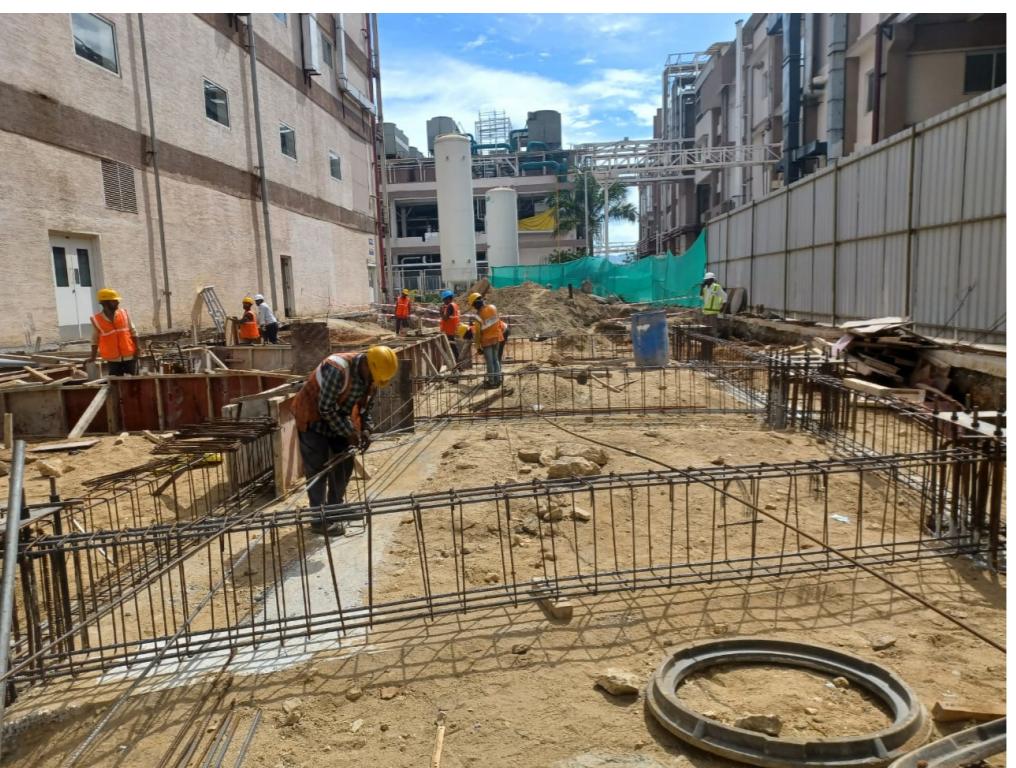
WORK CONTRIBUTION:

- 1) Demonstrated walkthrough of building in Autodesk Viewer.

SOFTWARE USED:

- 1) Revit

ANTHEM BIOSCIENCES - CP7 - SITE IMAGES



GD WALDNER - EPSILON - ASHOKA LAB

Epsilon Advanced Materials, headquartered in Mumbai, is a global leader in producing high-quality battery materials. Since 2018, the company has been dedicated to advancing battery technology. The Project Epsilon in Odisha is a state-of-the-art battery material research facility with laboratories. Studio Archnovate is responsible for the basic floor plan layout and interiors, while another company handles the facade and site plan. GD Waldner oversees the lab layout, equipment, and services.

CLIENT: Epsilon Advanced Materials, GD Waldner

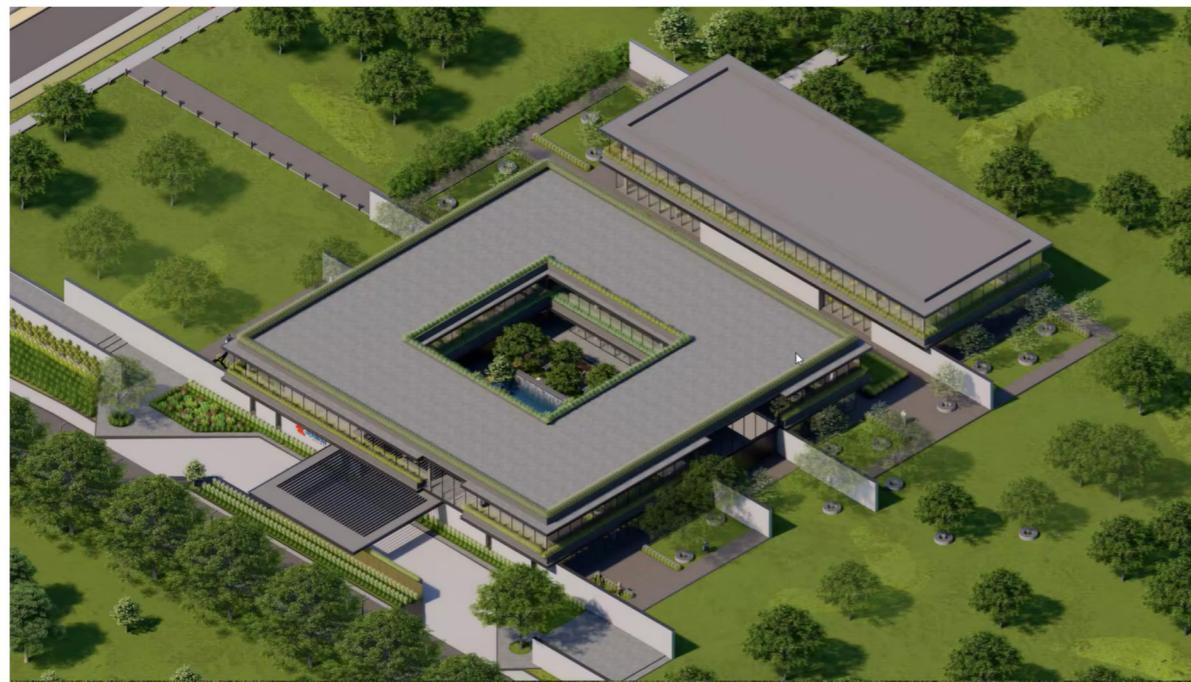
USAGE: Laboratory for battery materials research

LOCATION: Odisha

SIZE: 1 storey, ~715 sq.m = ~7,700 sqft

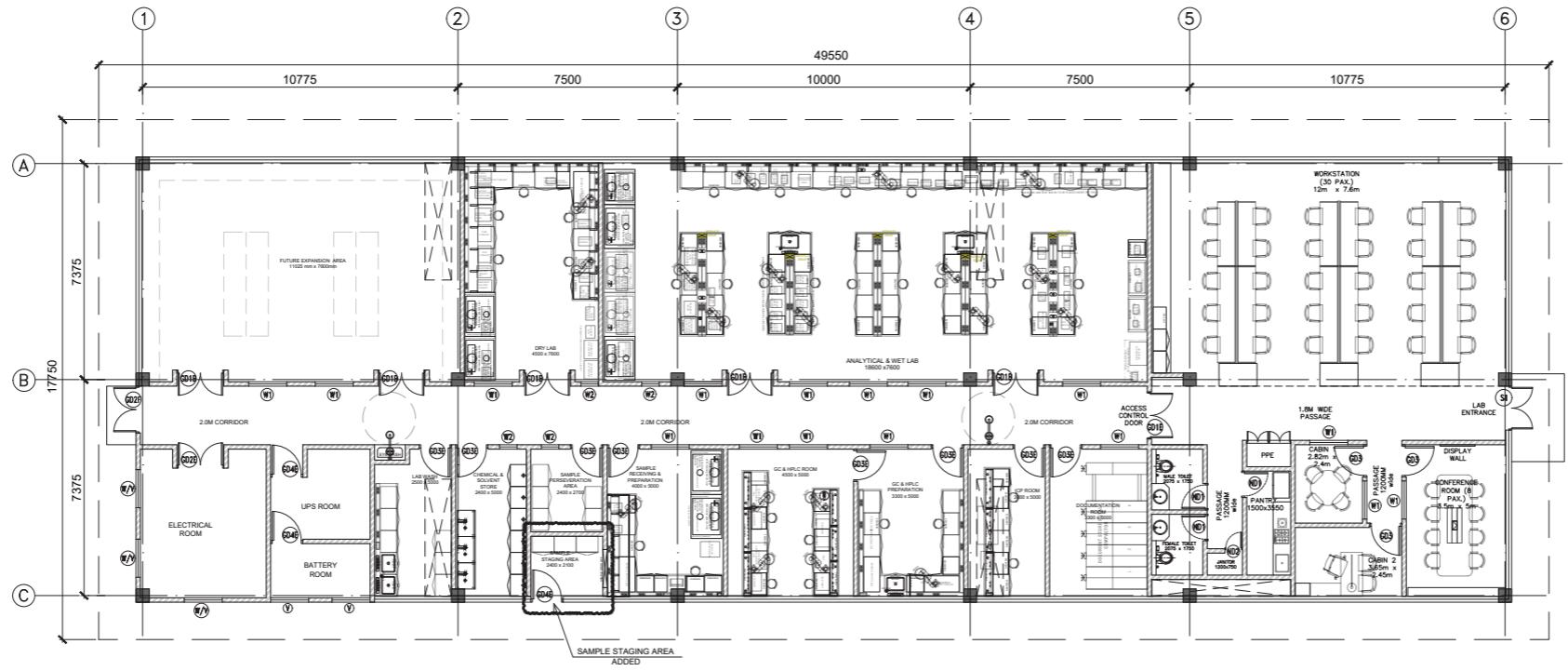
STAGE OF WORK: Schematic design - preliminary working drawings

SOFTWARE USED: AutoCAD



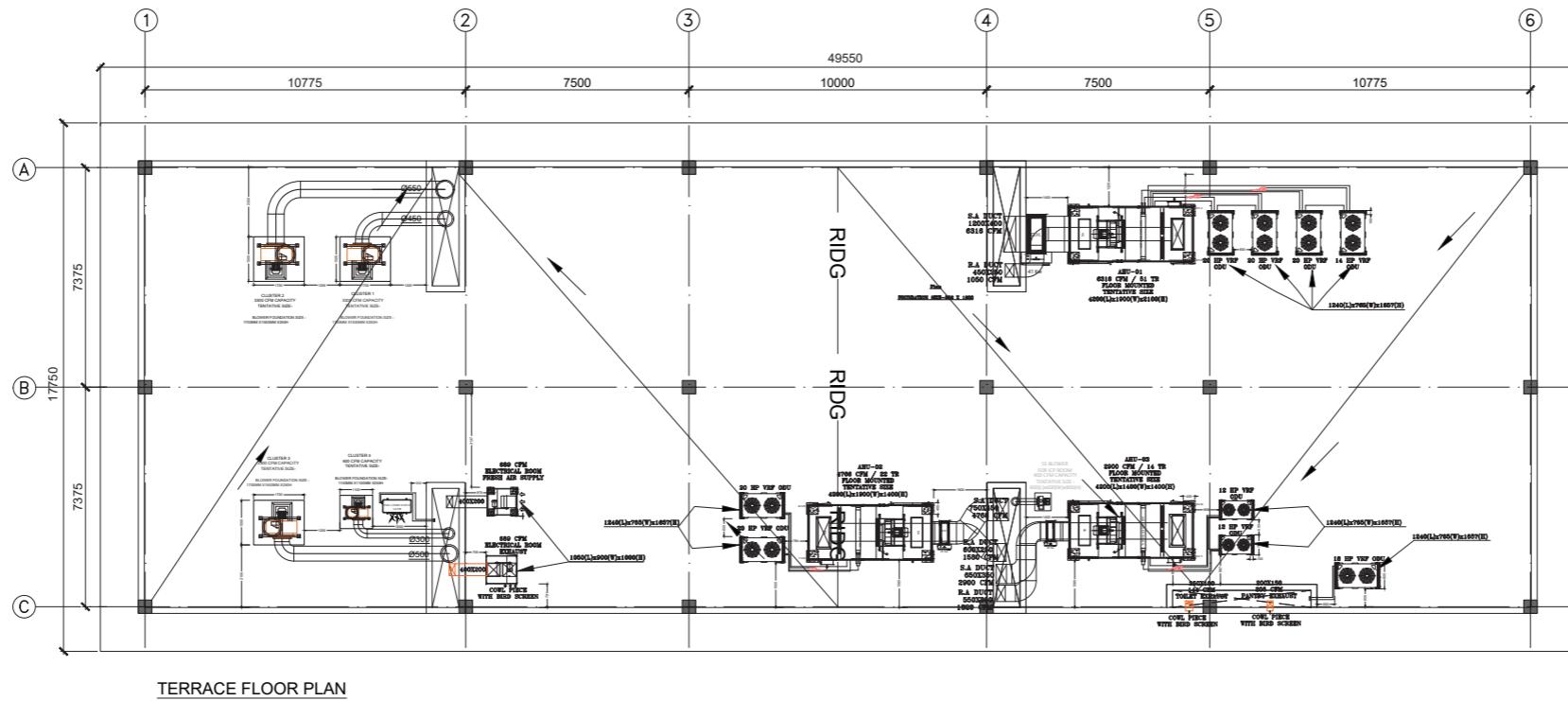
RENDERS BY INI DESIGN STUDIO





Note:	
Reference:	
1.	ALL DIMENSIONS ARE IN MILLIMETERS (MM)
2.	DO NOT MEASURE DRAWING . FOLLOW WRITTEN DIMENSIONS
3.	ANY DISCREPANCY SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS.
4.	GOOD FOR CONSTRUCTION VALID SUBJECT TO APPROPRIATE STATUTORY APPROVALS
LEGEND:	

SLNO	TYPE	SIZE	GF	SUB TYPE	PANIC BAR	LOCK	LEVER HANDLE	THRESHOLD
01	GD1	1600 X 2400	06	A	YES	YES	YES	YES
				B	YES	YES	YES	YES
				C	YES	YES	YES	YES
				D	YES	YES	YES	YES
				E	YES	YES	YES	YES
				F	YES	YES	YES	YES
02	GD2	1600 X 2400	02					
03	GD3	1100 X 2400	11					
04	GD4	1100 X 2400	03					
05	ND1	900 X 2100	03					
06	ND2	600 X 2100	01					



0	Issued for approval	Poornima	20.06.2024
Rev	Revision Description	By	Date
Project Title: ASHOKA LAB (ECPL)			
Client: epsilon GARCH M/s. Epsilon Carbon Pvt. Ltd, Odisha			
Turnkey Laboratory Solution Provider: GD Waldner www.gdwaldner.com			
Sub Contractor:			
Project No: GDWP092			
Drawing Title: GROUND FLOOR & ROOF PLAN			
Drawn by: Checked By: Approved By:			
ISSUED FOR APPROVAL			
Drawn by Poornima	Drawing No GDWP092-EPS-AL-OD-Acad-004	Issue Date 13.06.2024	
Checked by Dharmen	Scale 1:100 (A1)	Sheet No. 1 OF 1	Revision 0

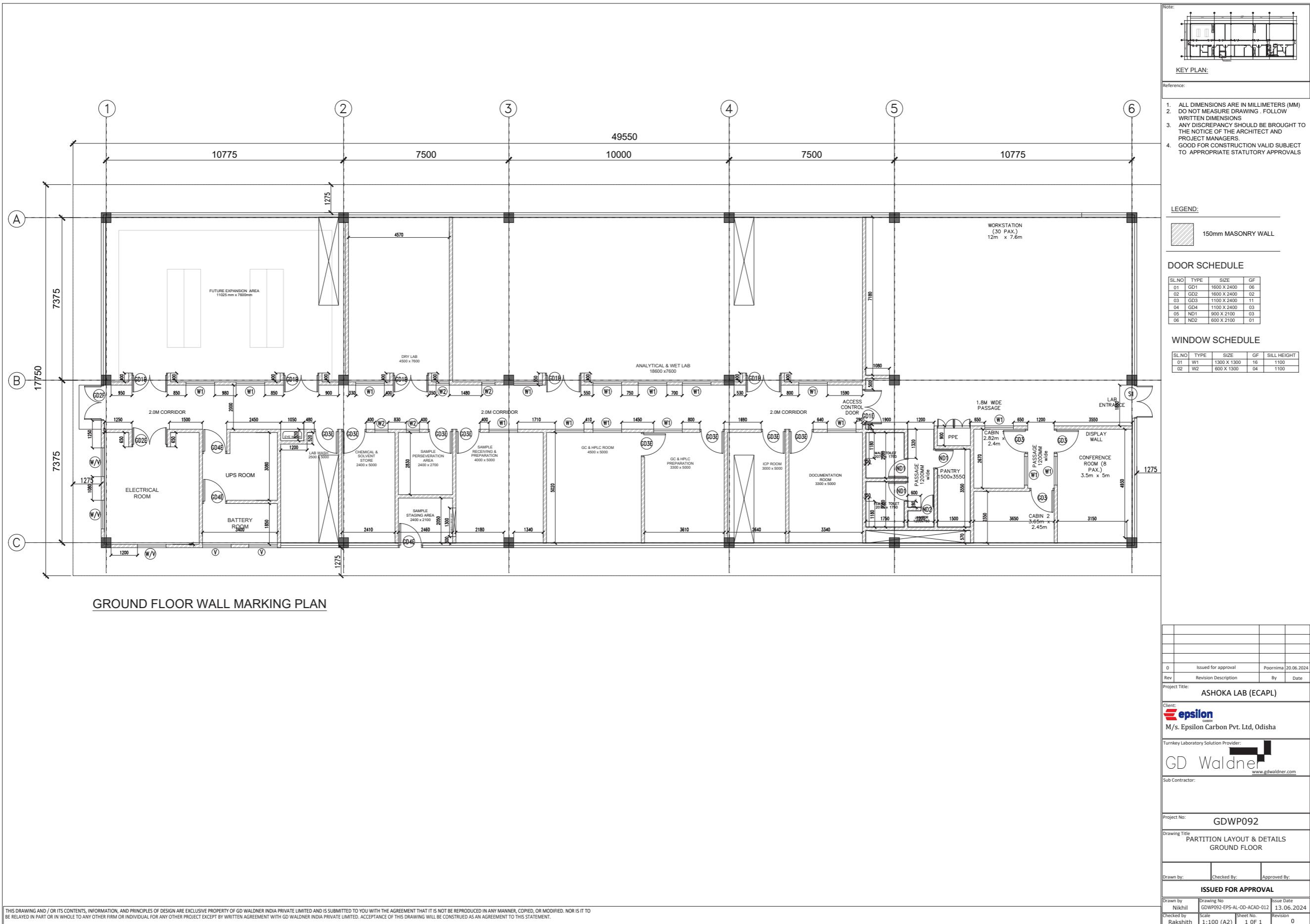
THIS DRAWING AND / OR ITS CONTENTS, INFORMATION, AND PRINCIPLES OF DESIGN ARE EXCLUSIVE PROPERTY OF GD WALDNER INDIA PRIVATE LIMITED AND IS SUBMITTED TO YOU WITH THE AGREEMENT THAT IT IS NOT BE REPRODUCED IN ANY MANNER, COPIED, OR MODIFIED. NOR IS IT TO BE RELAYED IN PART OR IN WHOLE TO ANY OTHER FIRM OR INDIVIDUAL FOR ANY OTHER PROJECT EXCEPT BY WRITTEN AGREEMENT WITH GD WALDNER INDIA PRIVATE LIMITED. ACCEPTANCE OF THIS DRAWING WILL BE CONSTRUED AS AN AGREEMENT TO THIS STATEMENT.

WORK CONTRIBUTION:

- 1) Updated and corrected architectural aspects of layout plan given by GD waldner team.
- 2) Added corrected sizes of doors, windows, wall thickness and made a schedule.

SOFTWARE USED:

- 1) AutoCAD

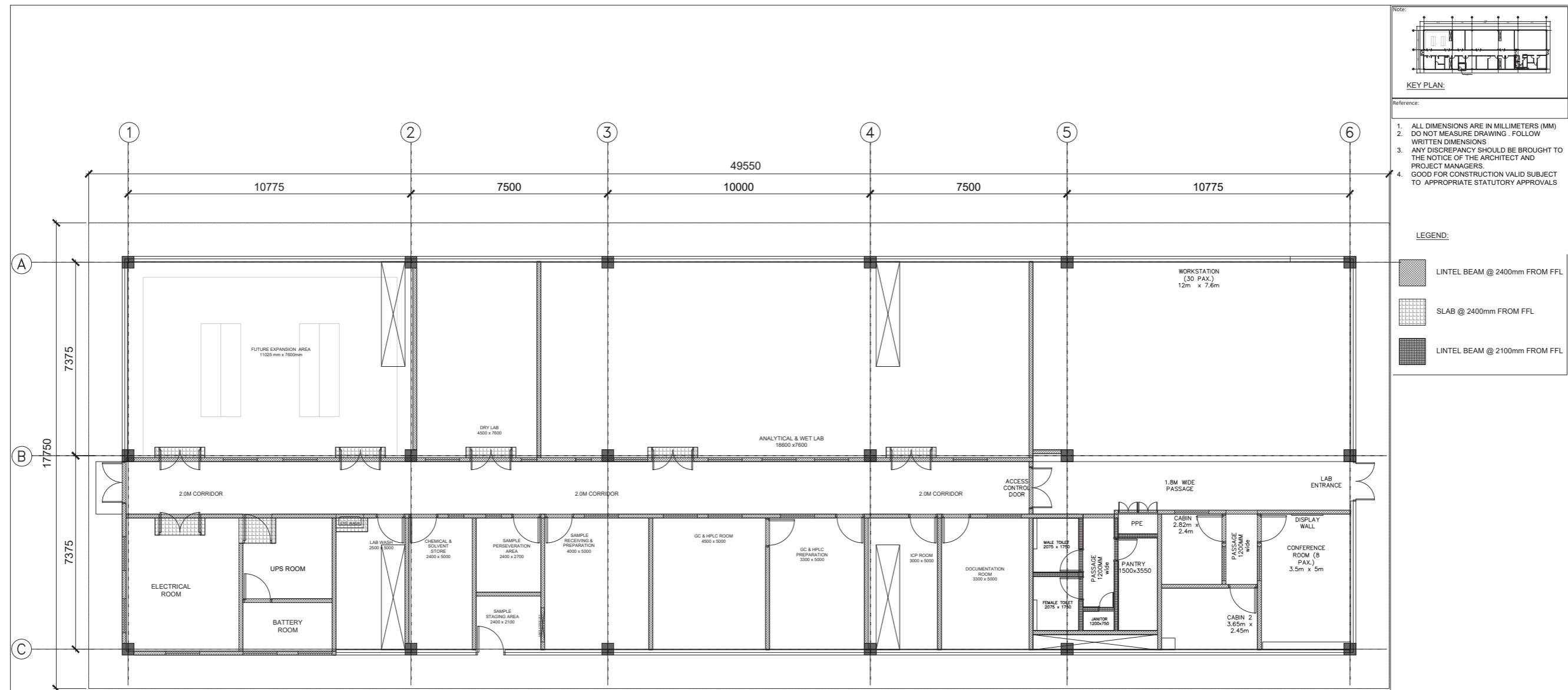


WORK CONTRIBUTION:

- Made wall marking plan.

SOFTWARE USED:

- AutoCAD



GROUND FLOOR LINTEL LAYOUT

0	Issued for approval	Poornima 20.06.2024
Rev Revision Description By Date		
Project Title: ASHOKA LAB (ECAPL)		
Client:	epsilon M/s. Epsilon Carbon Pvt. Ltd, Odisha	
Turnkey Laboratory Solution Provider:	GD Waldner www.gdwaldner.com	
Sub Contractor:		
Project No:	GDWP092	
Drawing Title:	LINTEL LAYOUT & DETAILS GROUND FLOOR	
Drawn by:	Checked By:	Approved By:
ISSUED FOR APPROVAL		
Drawn by Nikhil	Drawing No GDWP092-EPS-AL-0D-ACAD-020	Issue Date 11.06.2024
Checked by Rakshith	Scale 1:100 (A2)	Sheet No. 1 OF 1
		Revision 0

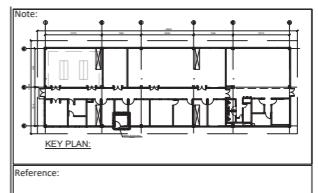
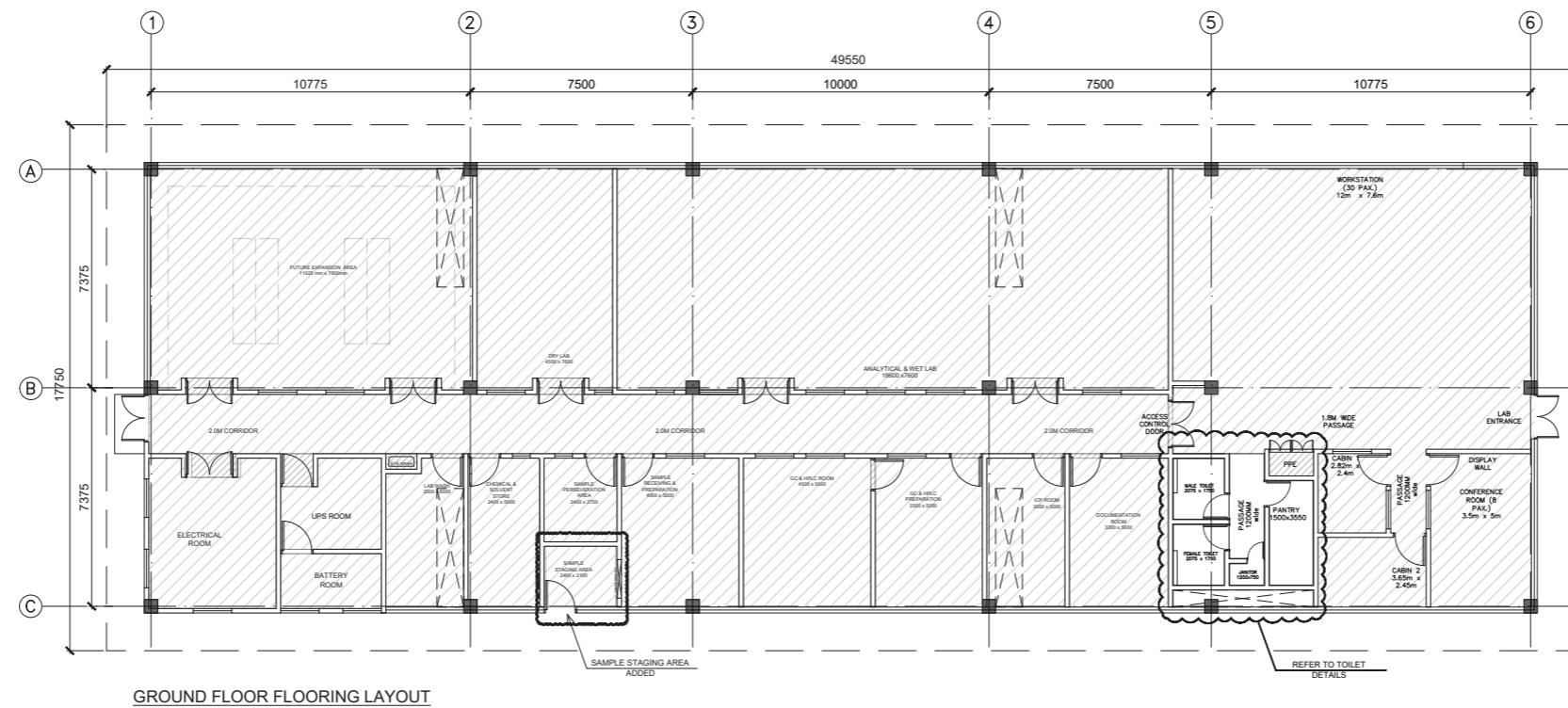
THIS DRAWING AND / OR ITS CONTENTS, INFORMATION, AND PRINCIPLES OF DESIGN ARE EXCLUSIVE PROPERTY OF GD WALDNER INDIA PRIVATE LIMITED AND IS SUBMITTED TO YOU WITH THE AGREEMENT THAT IT IS NOT BE REPRODUCED IN ANY MANNER, COPIED, OR MODIFIED. NOR IS IT TO BE RELAYED IN PART OR IN WHOLE TO ANY OTHER FIRM OR INDIVIDUAL FOR ANY OTHER PROJECT EXCEPT BY WRITTEN AGREEMENT WITH GD WALDNER INDIA PRIVATE LIMITED. ACCEPTANCE OF THIS DRAWING WILL BE CONSTRUED AS AN AGREEMENT TO THIS STATEMENT.

WORK CONTRIBUTION:

- Made lintel layout plan.

SOFTWARE USED:

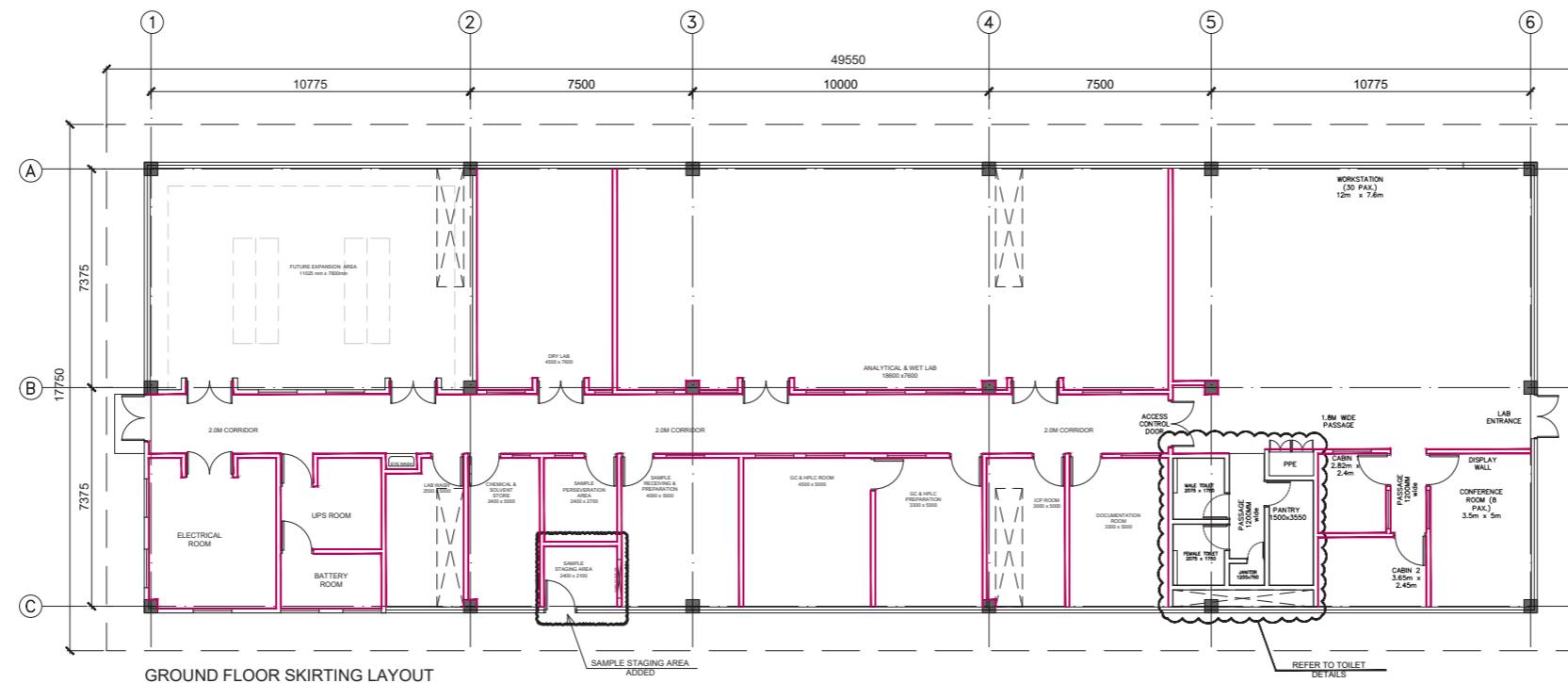
- AutoCAD



Note:
 1. ALL DIMENSIONS ARE IN MILLIMETERS (MM)
 2. DO NOT MEASURE DRAWING . FOLLOW WRITTEN DIMENSIONS
 3. ANY DISCREPANCY SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECT AND PROJECT MANAGERS.
 4. GOOD FOR CONSTRUCTION VALID SUBJECT TO APPROPRIATE STATUTORY APPROVALS

LEGEND:

Hatched area: APPROVED BLACK GRANITE STONE FLOORING



0	Issued for approval	Poornima	20.06.2024
Rev	Revision Description	By	Date
Project Title: ASHOKA LAB (ECPL)			

Client: **epsilon** GARNON
M/s. Epsilon Carbon Pvt. Ltd, Odisha

Turnkey Laboratory Solution Provider: **GD Waldner** www.gdwaldner.com

Sub Contractor:

Project No: GDWP092

Drawing Title: FLOORING LAYOUT & DETAILS

Drawn by: Checked by: Approved By:

ISSUED FOR APPROVAL

Drawn by	Drawing No	Issue Date
Poornima	GDWP092-EPS-AL-OD-Acad-013	17.06.2024

Checked by: Scale: Sheet No.: Revision:

Dharmen 1:100 (A1) 1 OF 1 0

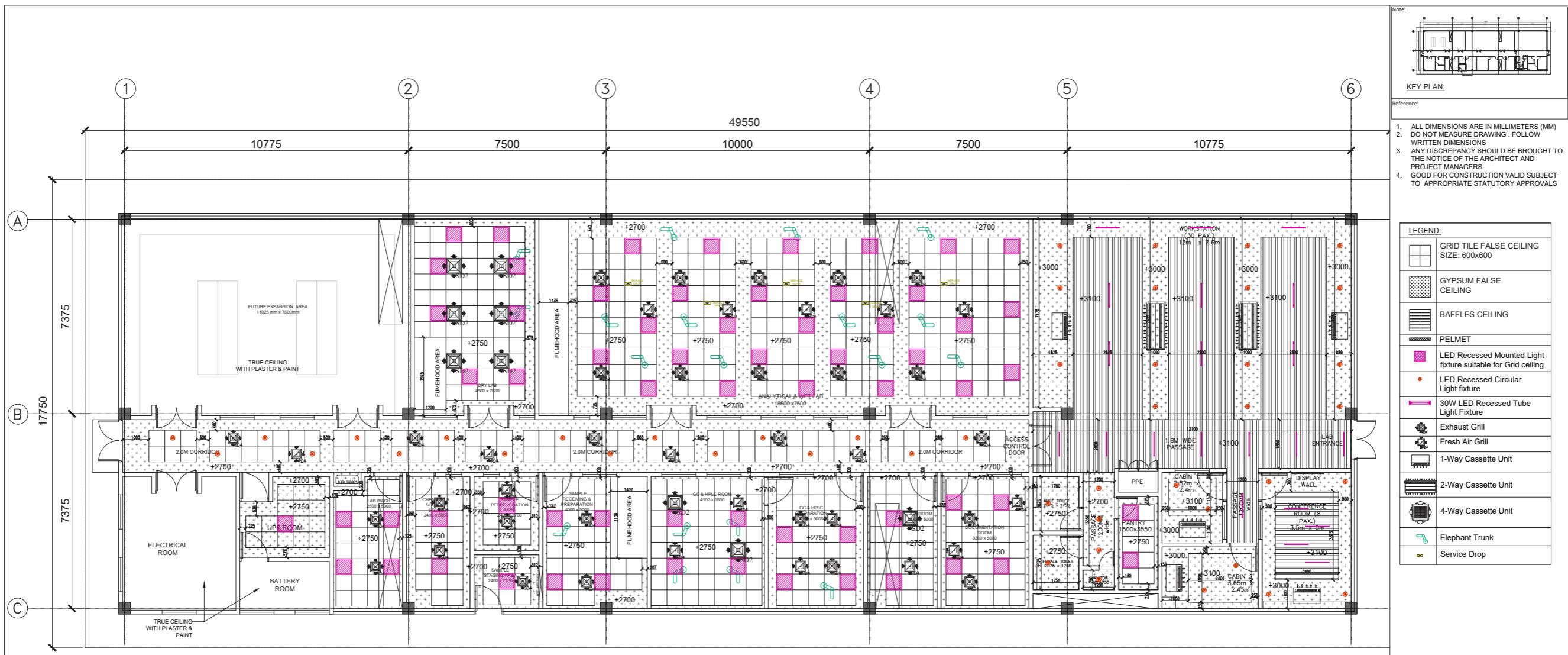
THIS DRAWING AND / OR ITS CONTENTS, INFORMATION, AND PRINCIPLES OF DESIGN ARE EXCLUSIVE PROPERTY OF GD WALDNER INDIA PRIVATE LIMITED AND IS SUBMITTED TO YOU WITH THE AGREEMENT THAT IT IS NOT BE REPRODUCED IN ANY MANNER, COPIED, OR MODIFIED. NOR IS IT TO BE RELAYED IN PART OR IN WHOLE TO ANY OTHER FIRM OR INDIVIDUAL FOR ANY OTHER PROJECT EXCEPT BY WRITTEN AGREEMENT WITH GD WALDNER INDIA PRIVATE LIMITED. ACCEPTANCE OF THIS DRAWING WILL BE CONSTRUED AS AN AGREEMENT TO THIS STATEMENT.

WORK CONTRIBUTION:

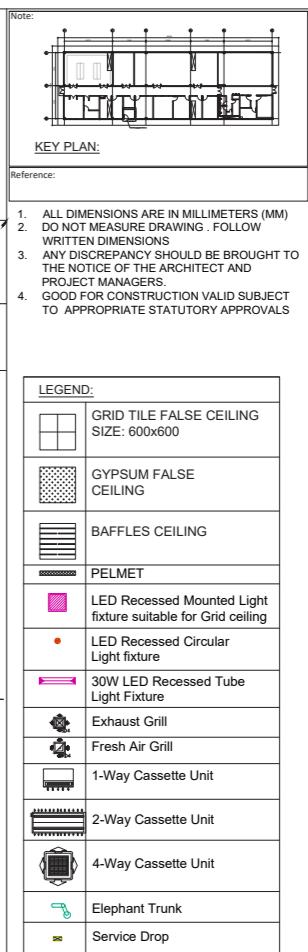
- Made indicative flooring layout plan.
- Made skirting layout plan.

SOFTWARE USED:

- AutoCAD



THIS DRAWING AND / OR ITS CONTENTS, INFORMATION, AND PRINCIPLES OF DESIGN ARE EXCLUSIVE PROPERTY OF GD WALDNER INDIA PRIVATE LIMITED AND IS SUBMITTED TO YOU WITH THE AGREEMENT THAT IT IS NOT BE REPRODUCED IN ANY MANNER, COPIED, OR MODIFIED. NOR IS IT TO BE RELAYED IN PART OR IN WHOLE TO ANY OTHER FIRM OR INDIVIDUAL FOR ANY OTHER PROJECT EXCEPT BY WRITTEN AGREEMENT WITH GD WALDNER INDIA PRIVATE LIMITED. ACCEPTANCE OF THIS DRAWING WILL BE CONSTRUED AS AN AGREEMENT TO THIS STATEMENT.



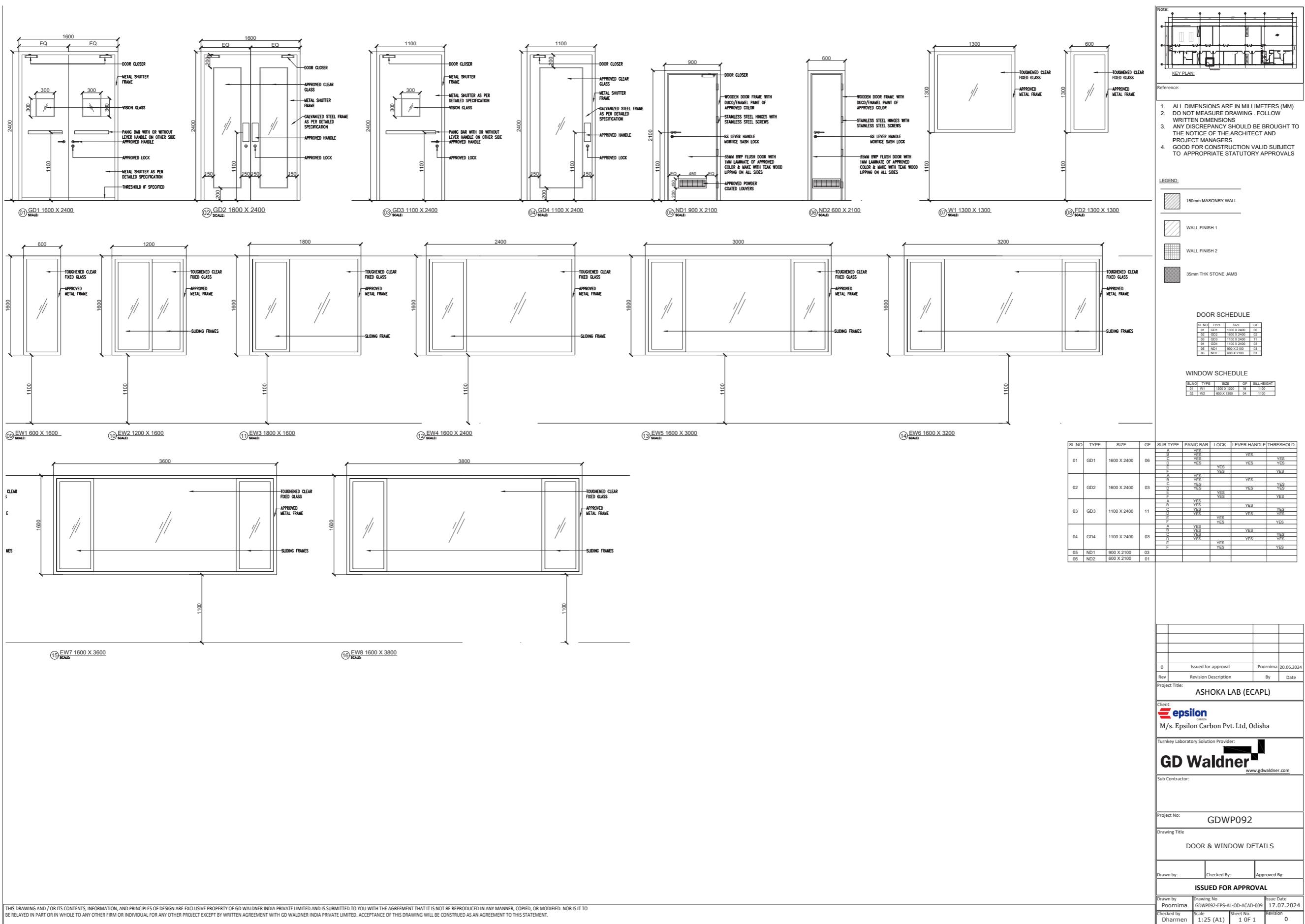
0	Issued for approval	Poornima	20.06.2024
Rev	Revision Description	By	Date
Project Title: ASHOKA LAB (ECAPL)			
Client: epsilon M/s. Epsilon Carbon Pvt. Ltd, Odisha			
Turnkey Laboratory Solution Provider: GD Waldner www.gdwaldner.com			
Sub Contractor:			
Project No: GDWP092			
Drawing Title: REFLECTED CEILING LAYOUT & DETAILS GROUND FLOOR			
Drawn by:	Checked By:	Approved By:	
ISSUED FOR APPROVAL			
Drawn by Nikhil	Drawing No: GDWP092-EPS-AL-OD-Acad-014	Issue Date: 11.06.2024	
Checked by Rakshith	Scale: 1:100 (A2)	Sheet No: 1 OF 1	Revision: 0

WORK CONTRIBUTION:

- 1) Designed false ceiling layout, referring to HVAC, electrical lighting layout plans.
- 2) Made reflected ceiling plan.

SOFTWARE USED:

- 1) AutoCAD

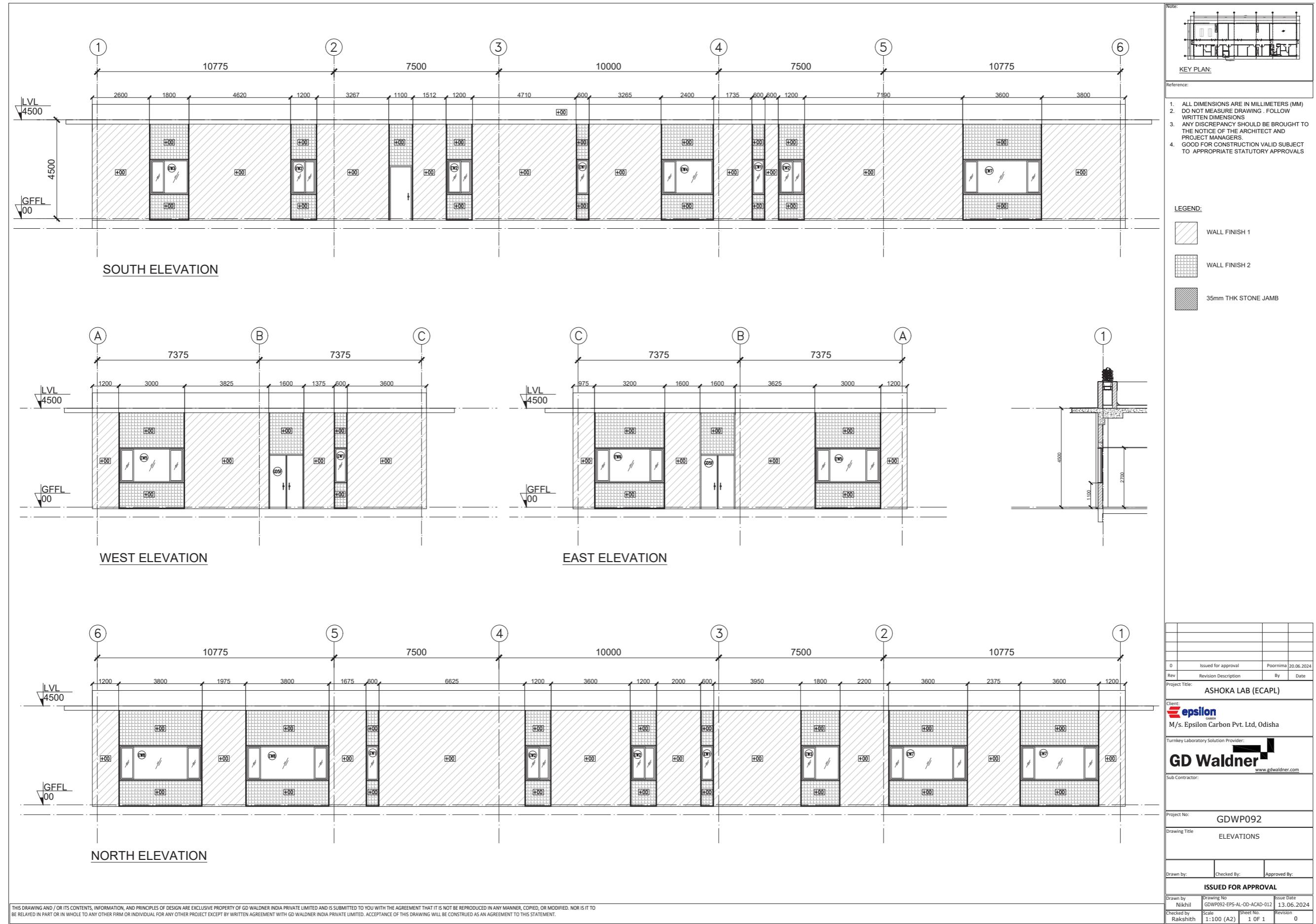


WORK CONTRIBUTION:

- Made door & window details sheet.

SOFTWARE USED:

- AutoCAD

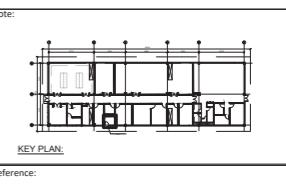
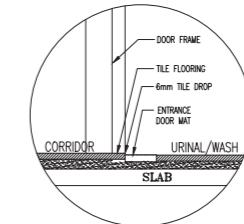
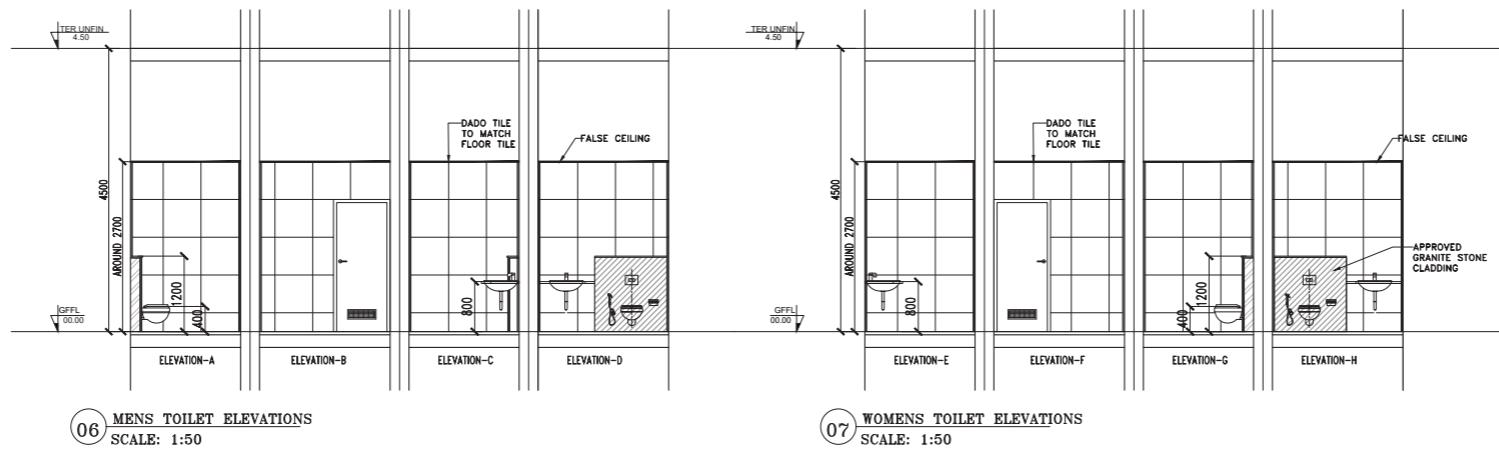
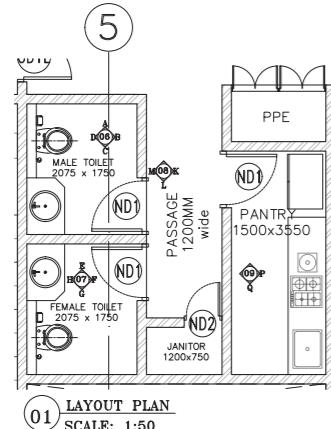


WORK CONTRIBUTION:

- Made elevations drawings from design given by client.

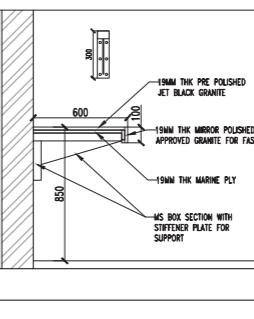
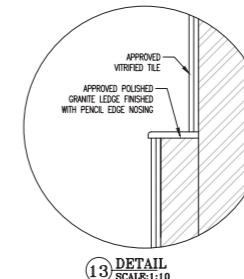
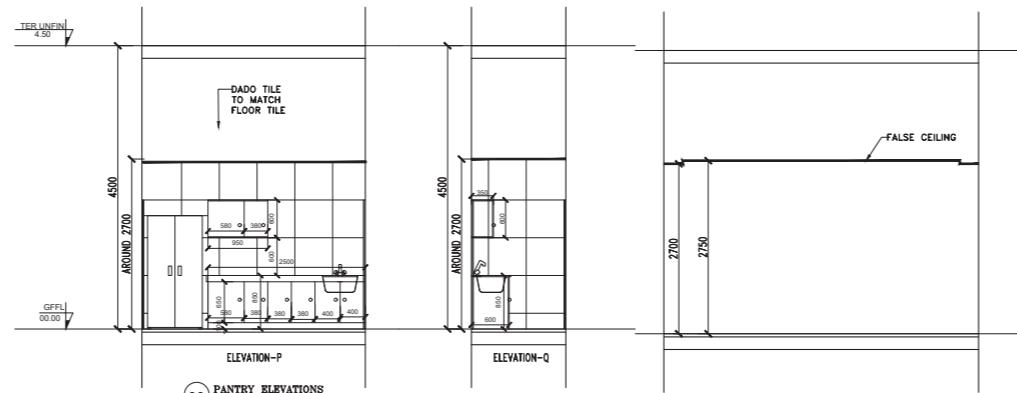
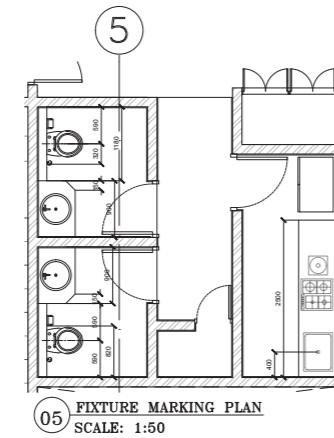
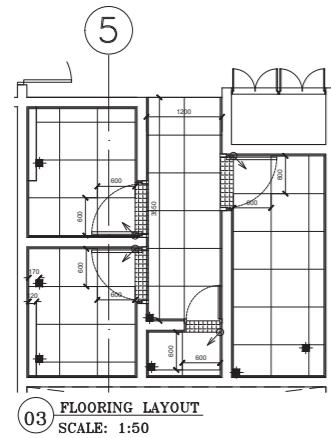
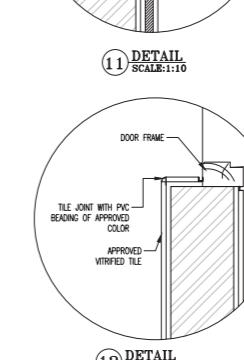
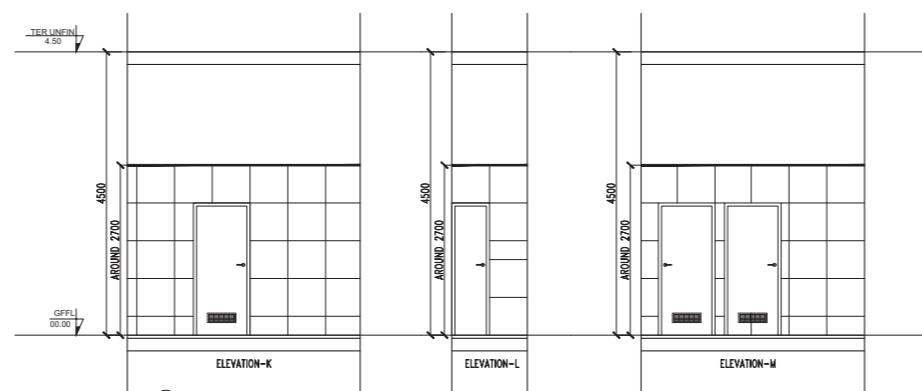
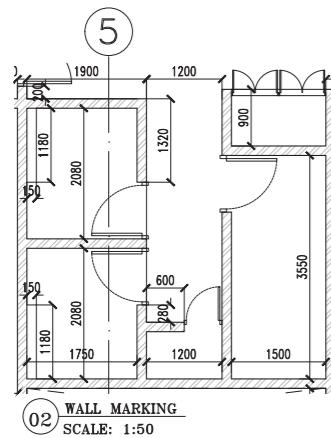
SOFTWARE USED:

- AutoCAD



SPECIAL NOTE
1. DADO JOINTS SHALL MATCH FLOOR JOINTS.
2. FLOOR & DADO TILES SHALL BE LAID WITH 3mm SPACER.
3. WC COVER WILL BE OF HEIGHT 1200mm ABOVE THE OPEN POSITION OF THE WC COVER.
4. WC CISTERN WILL BE OF HEIGHT 1200mm FROM FFL.
5. TOP OF LEDGE OF WC SHALL BE AT NECESSARY DIMENSION ABOVE THE WC PLATE.
6. RENDER & CERAMIC TEXTURES & DADO WALL SHALL BE SEALED WITH TILE GROUT OR APPROVED.
7. DADO TILES ON FLOOR & WALL SHALL START FROM TOP, BUT WITH NECESSARY ALLOWANCE (CONSIDER UP TO 50mm) FOR FLOOR SLOPE AND TILE DROP TILL 9. ALL THE CORNERS SHALL HAVE CORNER EDGE BEADING.
10. ALL THE JOINTS SHALL BE GROUTED WITH MK LATICRETE OR EQUIVALENT.
11. ALL THE JOINTS SHALL BE 3mm (MAX 4mm).
12. WATER PROOFING OF TOILET TO FOLLOW THE PERIODIC INSPECTION.
13. ALL THE DADO TILES ON FLOOR & WALL, PAVING LINES SHALL BE COMPLETE BEFORE DADO WORK.
14. DADO TILES ON FLOOR & WALL SHALL BE MARKED ON RAW FLOOR BEFORE LAYING DRAIN POINTS AND DRAIN PIPES.
15. DADO TILES ON FLOOR & WALL SHALL BE LOCATED SUCH THAT MINIMAL TILES ARE CUT DURING LAYING.
16. NANI TRAP OUTLET SHALL BE SQUARE OR RECTANGULAR AS SPECIFIED.
17. WC SHALL BE WALL MOUNTED.

LEGEND:	
	TOILET COMMODE
	WASHBASIN
	DRAIN FILTER
	SLOPE DIRECTION INDICATION



0	Issued for approval	Poornima	20.06.2024
Rev	Revision Description	By	Date

Project Title: ASHOKA LAB (ECPL)

Client: **epsilon**
M/s. Epsilon Carbon Pvt. Ltd, Odisha

Turnkey Laboratory Solution Provider:
GD Waldner
www.gdwaldner.com

Sub Contractor:

Project No: GDWP092

Drawing Title: TOILET LAYOUT & DETAILS

Drawn by: Checked by: Approved by:

ISSUED FOR APPROVAL

Drawn by Nikhil	Drawing No GDWP092-EPS-AL-OD-Acad-011	Issue Date 11.06.2024
Checked by Rakshith	Scale 1:50 (A1)	Sheet No. 1 OF 1

THIS DRAWING AND / OR ITS CONTENTS, INFORMATION, AND PRINCIPLES OF DESIGN ARE EXCLUSIVE PROPERTY OF GD WALDNER INDIA PRIVATE LIMITED AND IS SUBMITTED TO YOU WITH THE AGREEMENT THAT IT IS NOT BE REPRODUCED IN ANY MANNER, COPIED, OR MODIFIED. NOR IS IT TO BE RELAYED IN PART OR IN WHOLE TO ANY OTHER FIRM OR INDIVIDUAL FOR ANY OTHER PROJECT EXCEPT BY WRITTEN AGREEMENT WITH GD WALDNER INDIA PRIVATE LIMITED. ACCEPTANCE OF THIS DRAWING WILL BE CONSTRUED AS AN AGREEMENT TO THIS STATEMENT.

WORK CONTRIBUTION:

- Made toilet & pantry details sheet - all plans and elevations.

SOFTWARE USED:

- AutoCAD



ESSAE HOSUR

The Essae Hosur project, located in Koneripalli, Tamil Nadu, on the Bangalore-Chennai Highway, is a factory building for assembling Essae weighing machines. It has a built-up area of 40,500 square feet. The building has been in operation since February 2024, although some finishing touches and landscaping are still ongoing. This facility plays a crucial role in Essae's production, contributing to the company's commitment to providing quality weighing solutions.

CLIENT: Essae Tereoka

USAGE: Assembly of weighing machines

LOCATION: Hosur, Tamil Nadu

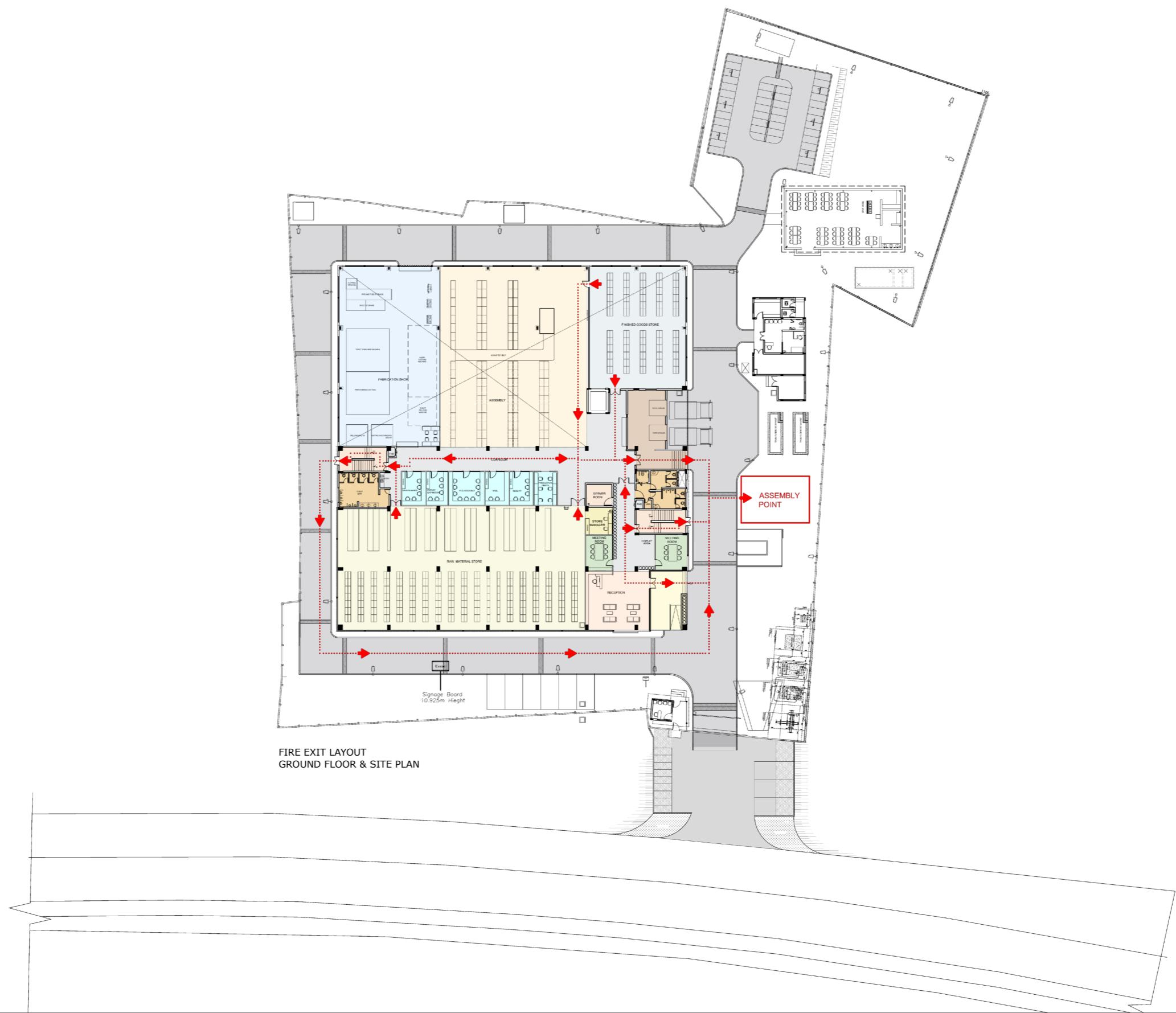
SIZE: 40,500 sqft

STAGE OF WORK: Completed and in-use

SOFTWARE USED: AutoCAD, Sketchup, D5 Render, Enscape

WORK CONTRIBUTION:

- 1) Took renders of facade.
- 2) Made updates to signage board.

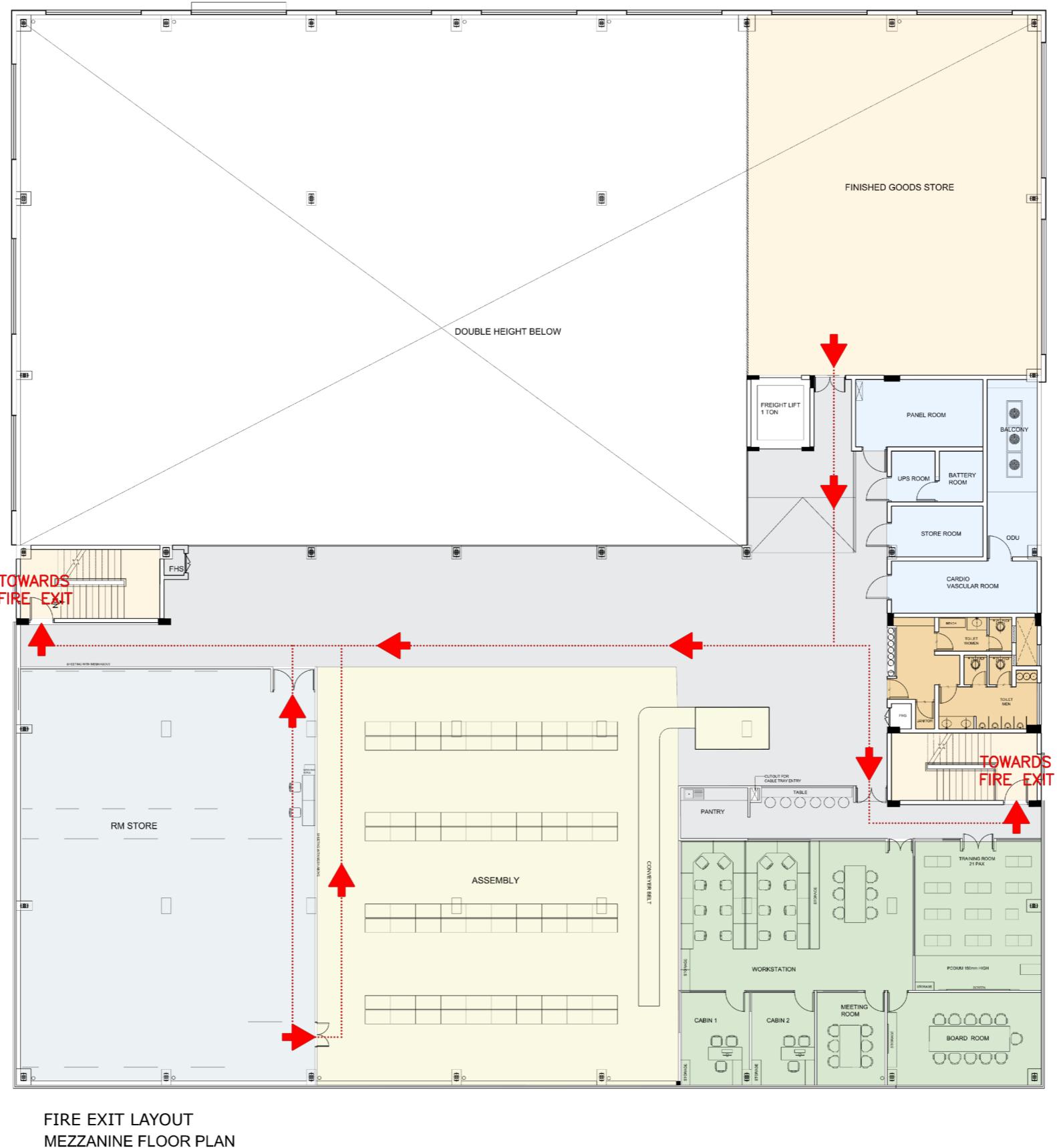


WORK CONTRIBUTION:

- 1) Made fire exit plan graphic for ground floor.

SOFTWARE USED:

- 1) AUTOCAD
- 2) GIMP



FIRE EXIT LAYOUT
MEZZANINE FLOOR PLAN

WORK CONTRIBUTION:

- 1) Made Fire exit plan for mezzanine floor.

SOFTWARE USED:

- 1) AutoCAD
- 2) GIMP

H-528 RESIDENCE



WORK CONTRIBUTION:

- 1) Modelled crockery units and took renders of dining hall area.

SOFTWARE USED:

- 1) Sketchup
- 2) Enscape

H-528 RESIDENCE

MADE ON MIDJOURNEY AI:



SIMPLIFIED AI IMAGES IN
PHOTOSHOP

OPTION A



OPTION B



OPTION C

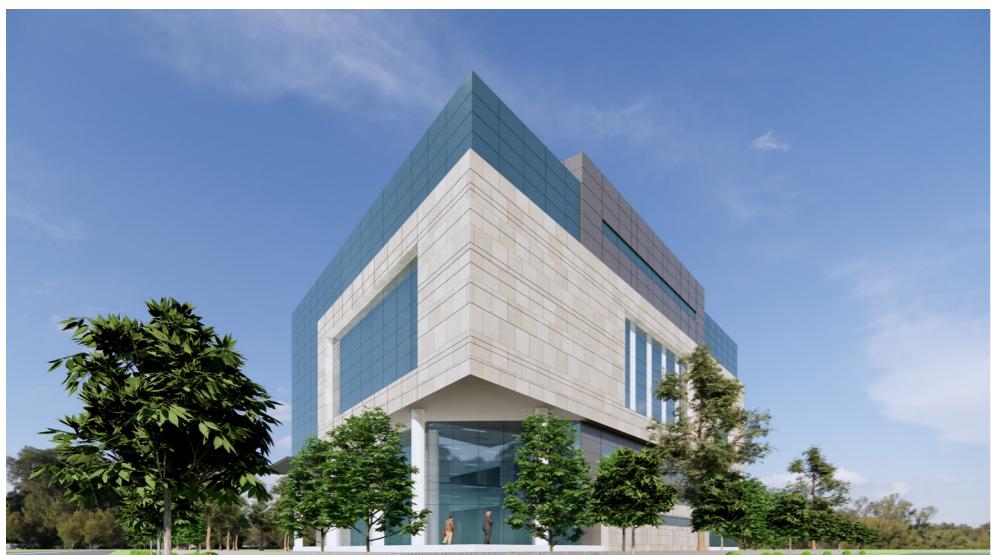
WORK CONTRIBUTION:

- 1) Made a few options of bookshelf cupboard for master bedroom.

SOFTWARE USED:

- 1) AutoCAD

EPSILON BANGALORE FACADE OPTIONS



OPTION 1



OPTION 2



OPTION 3

WORK CONTRIBUTION:

- 1) Modelled and rendered facade option 3.
- 2) Designed green wall shading device for option 3.

SOFTWARE USED:

- 1) Sketchup
- 2) Enscape

NA16 LANDSCAPE DESIGN & SITE VISIT



WORK CONTRIBUTION:

- 1) Designed landscape for area in front of NA16 admin block.
- 2) Modelled and rendered the design.
- 3) Made a drawing of it and added to site master plan.

SOFTWARE USED:

- 1) AutoCAD
- 2) Sketchup
- 3) Enscape



STELLA POLARIS - OMEXA - PHOENIX 1

Omexa Formulary, headquartered in Chennai, is a leader in the production of high-quality biosimilars. The Phoenix 1 project in Tamil Nadu is a manufacturing facility dedicated to biosimilars. Studio Archnovate is currently working on the schematic floor layouts and concept design for the facade, while Stella Polaris is guiding us with the lab and manufacturing layouts.

CLIENT: Omexa Formulary, Stella Polaris

USAGE: Biosimilars manufacturing

LOCATION: Tamil Nadu

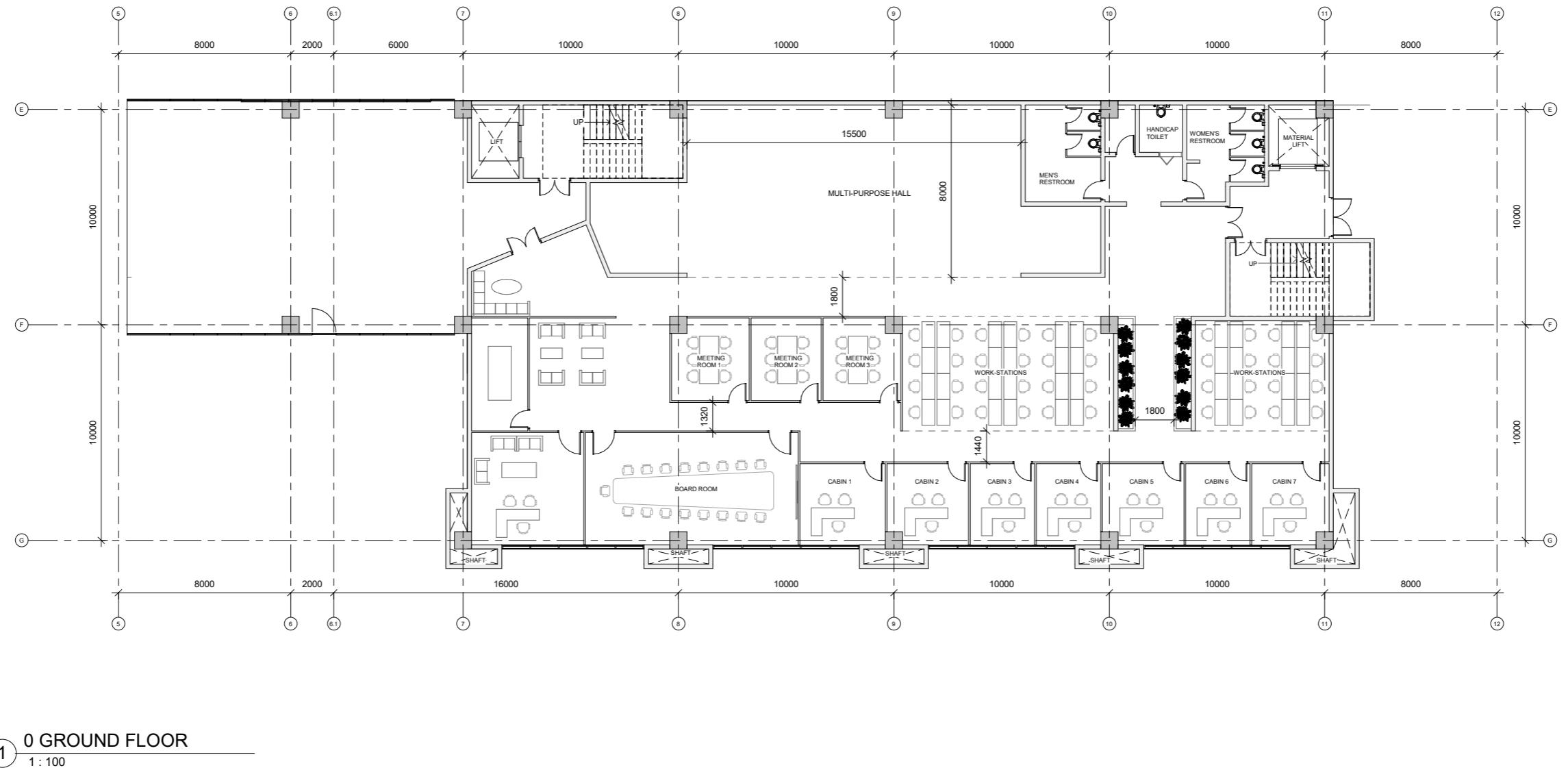
SIZE: ~15,000 sqm = ~ 161459 ft²

STAGE OF WORK: Concept Design

SOFTWARE USED: AutoCAD, Revit, Sketchup, D5 Render

WORK CONTRIBUTION:

- 1) Modelled building facade options in Revit and Sketchup.
- 2) Image rendered through Sketchup and D5 Render.

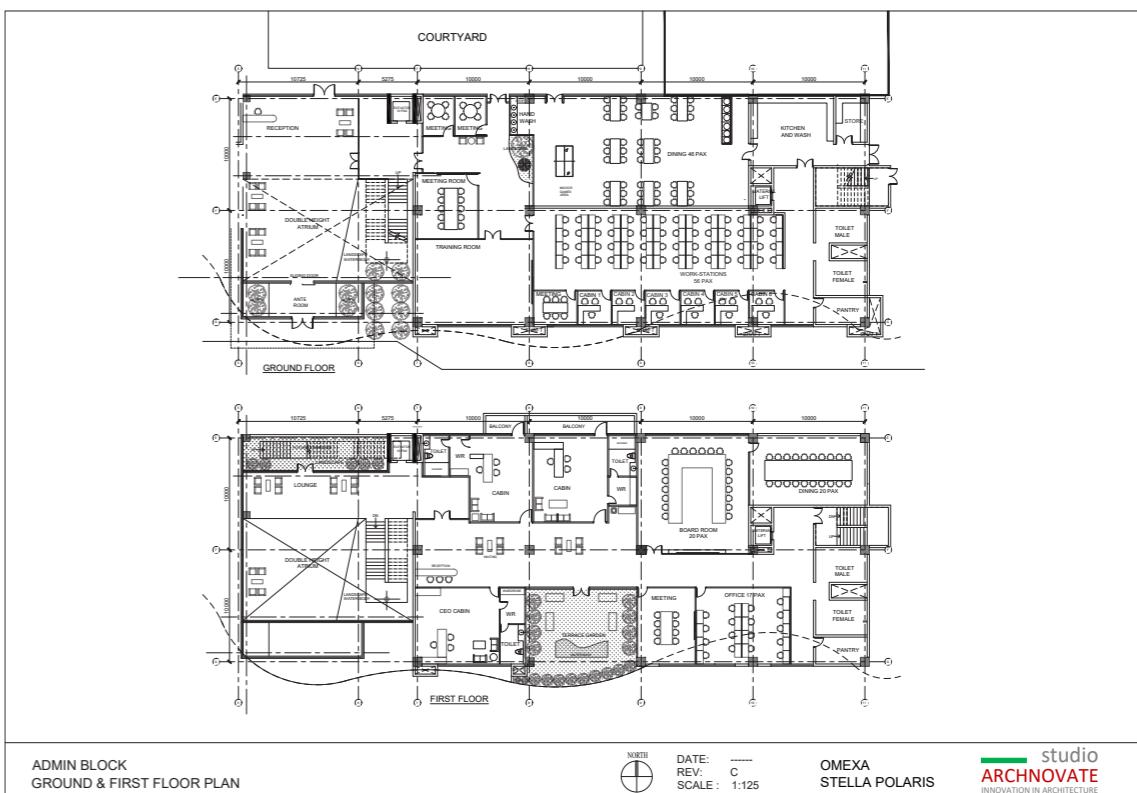
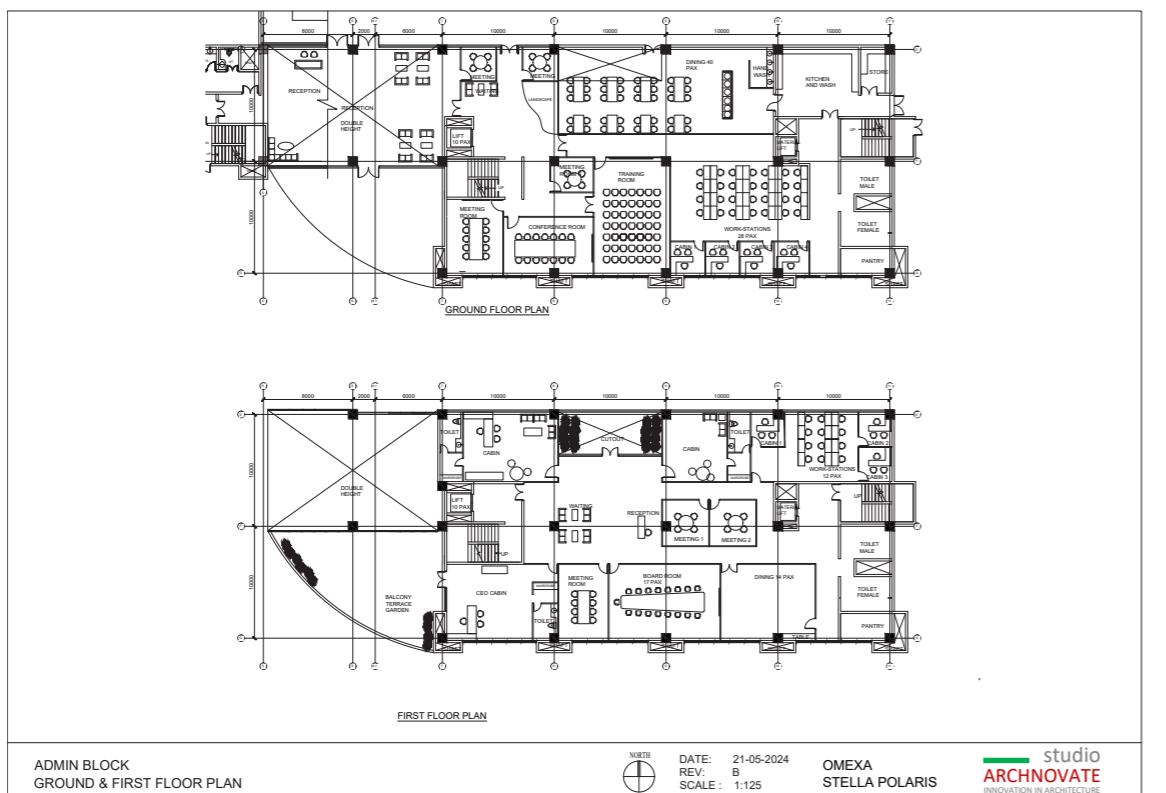
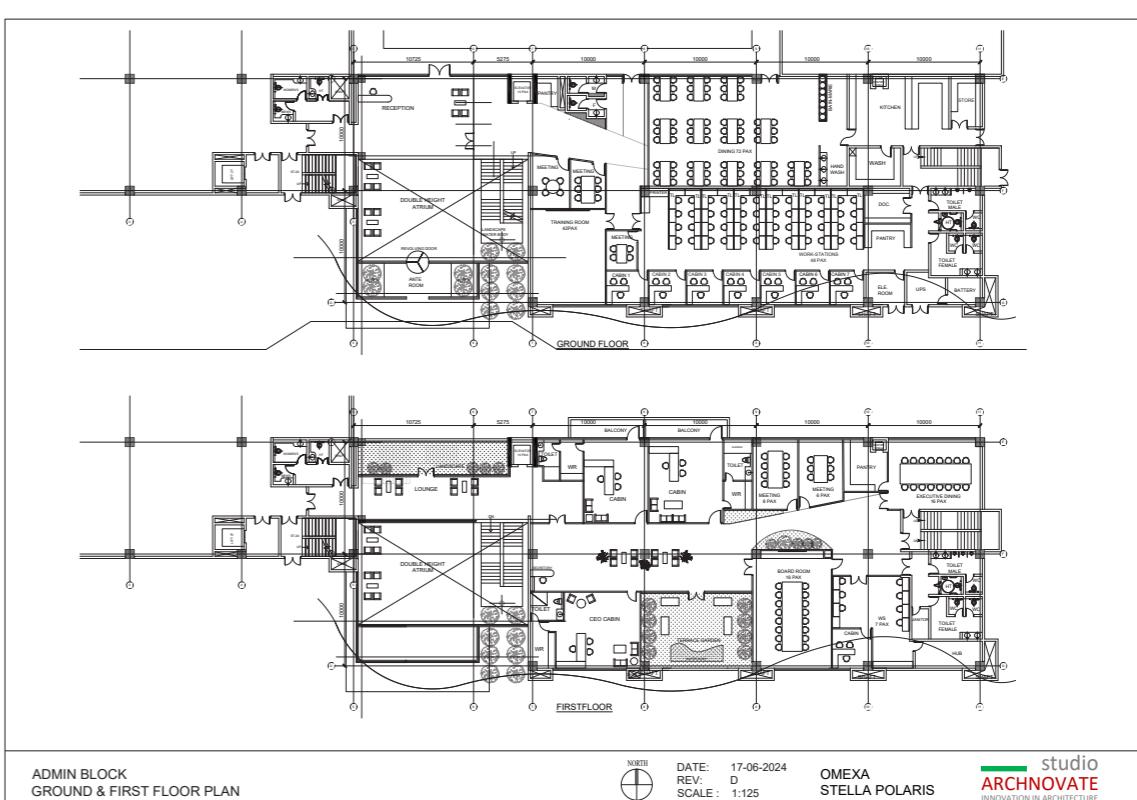
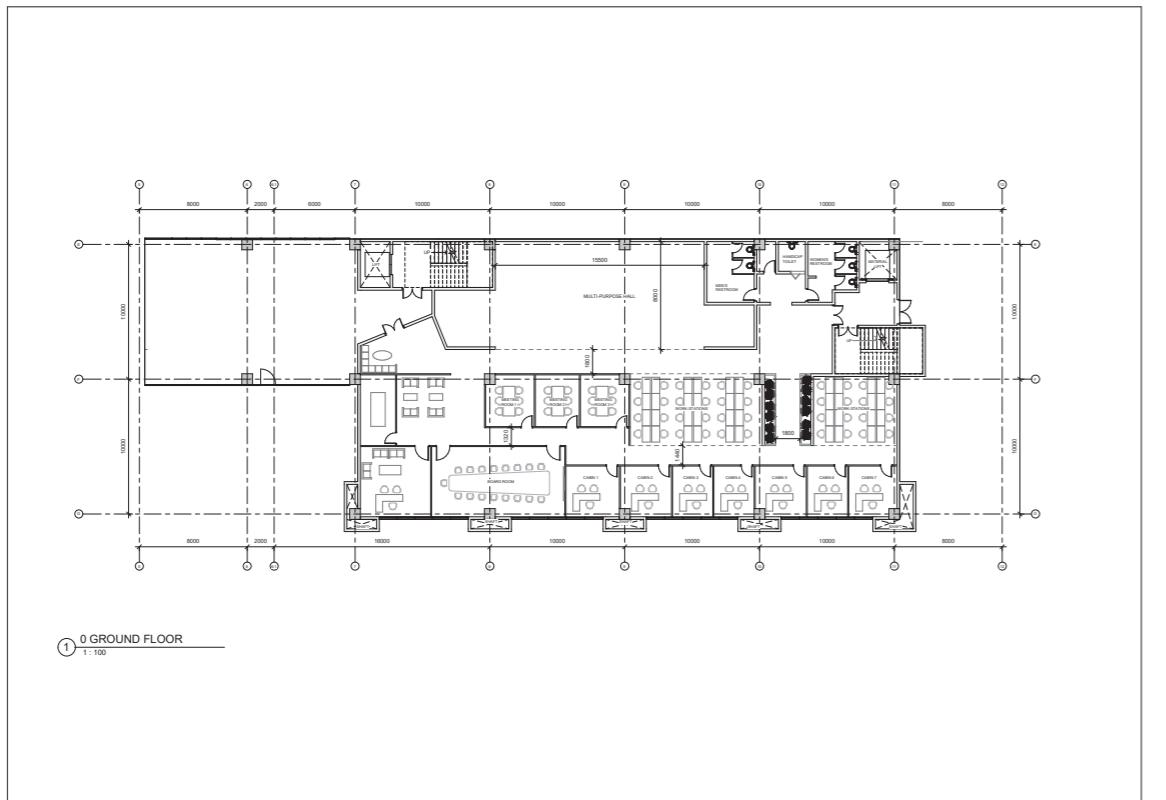


WORK CONTRIBUTION:

- 1) Made Version-A of floor plan for admin block in Revit.

SOFTWARE USED:

- 1) Revit
- 2) AutoCad

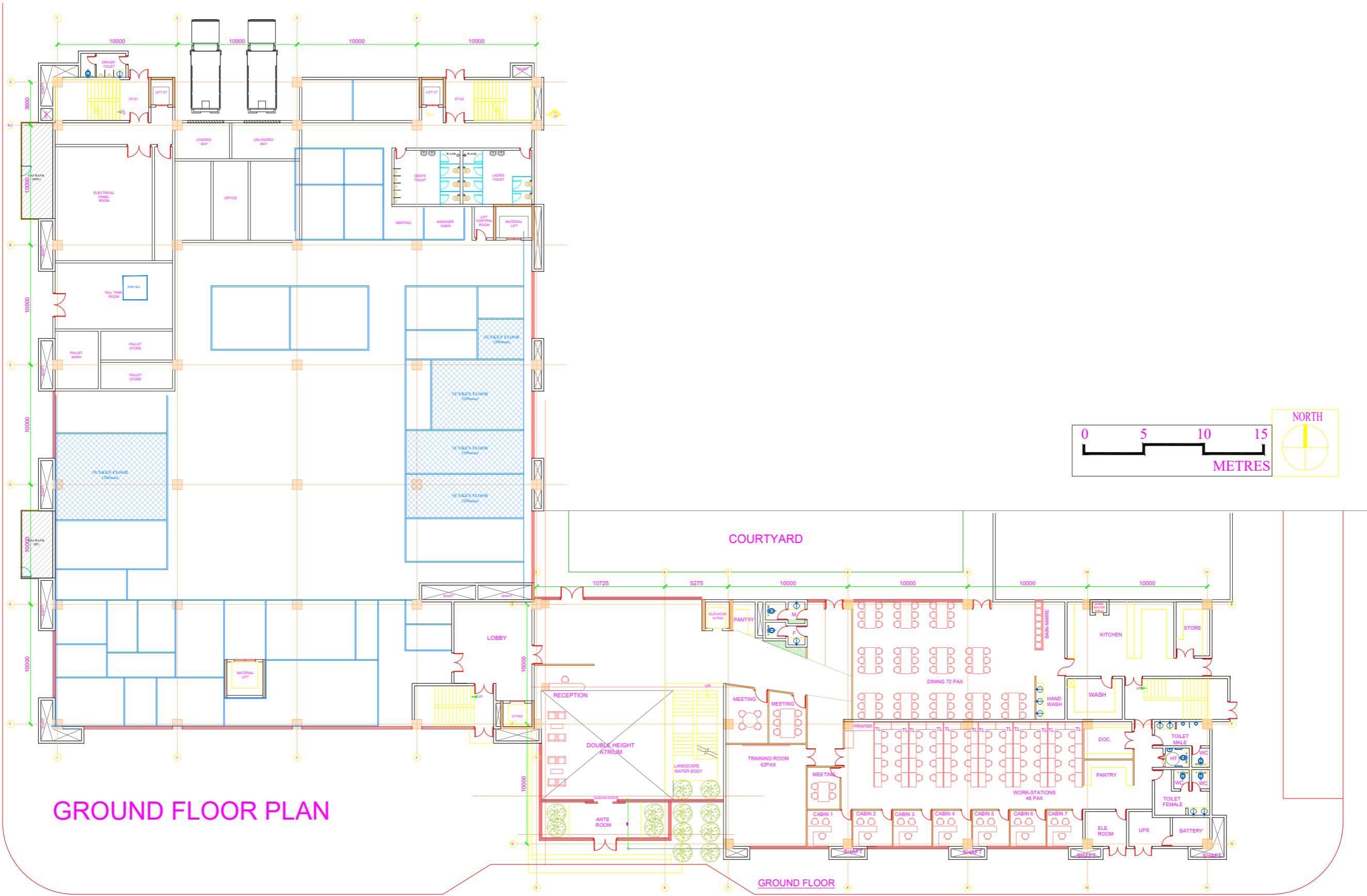


WORK CONTRIBUTION:

- 1) Contributed in drafting successive versions of floor plans of Ground floor and First floor of Admin block.

SOFTWARE USED:

- 1) AutoCAD

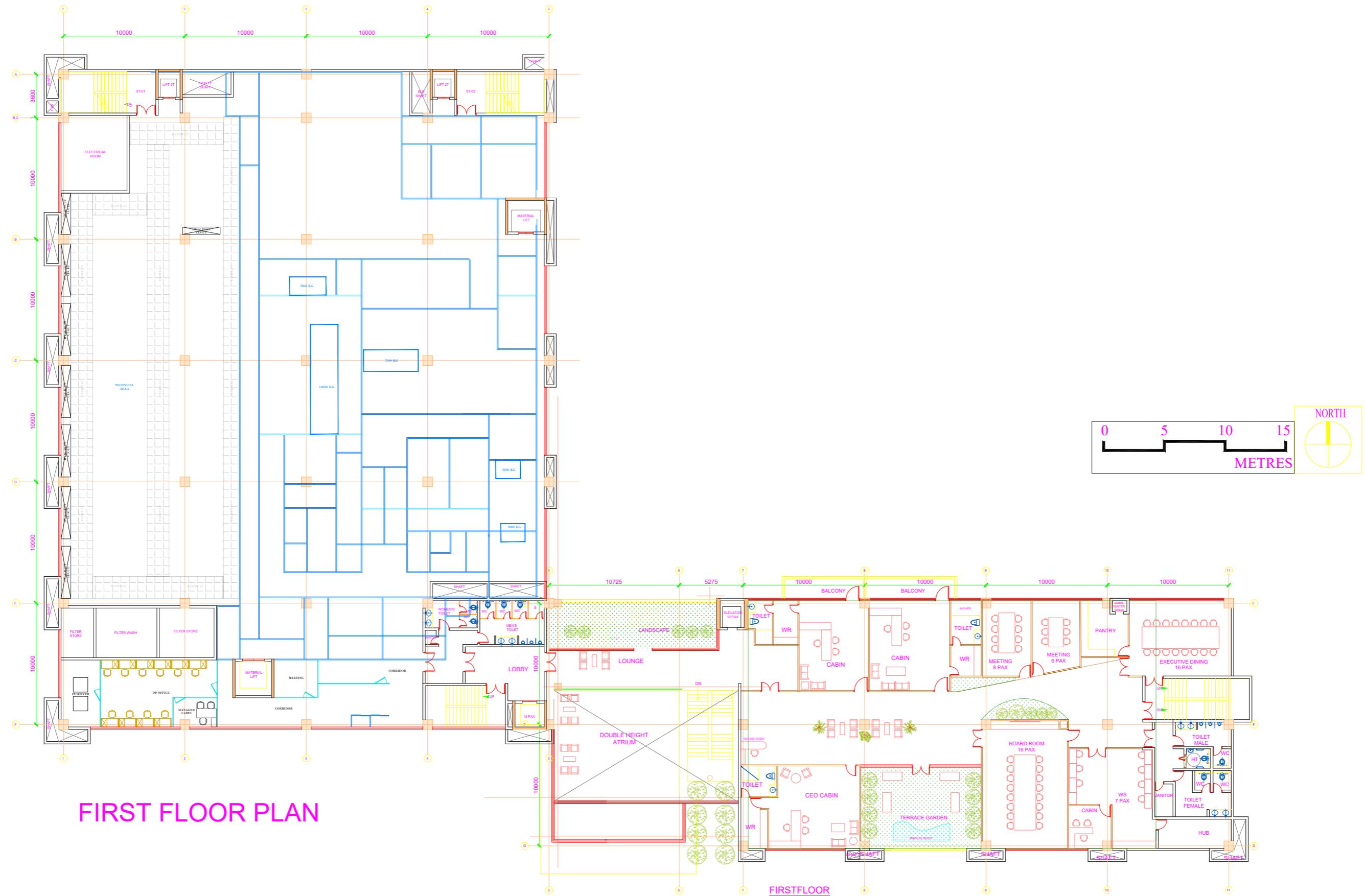


WORK CONTRIBUTION:

- 1) Combining manufacturing layouts given by Stella Polaris with floor plans of Manufacturing and Admin blocks.

SOFTWARE USED:

- ## 1) AutoCAD



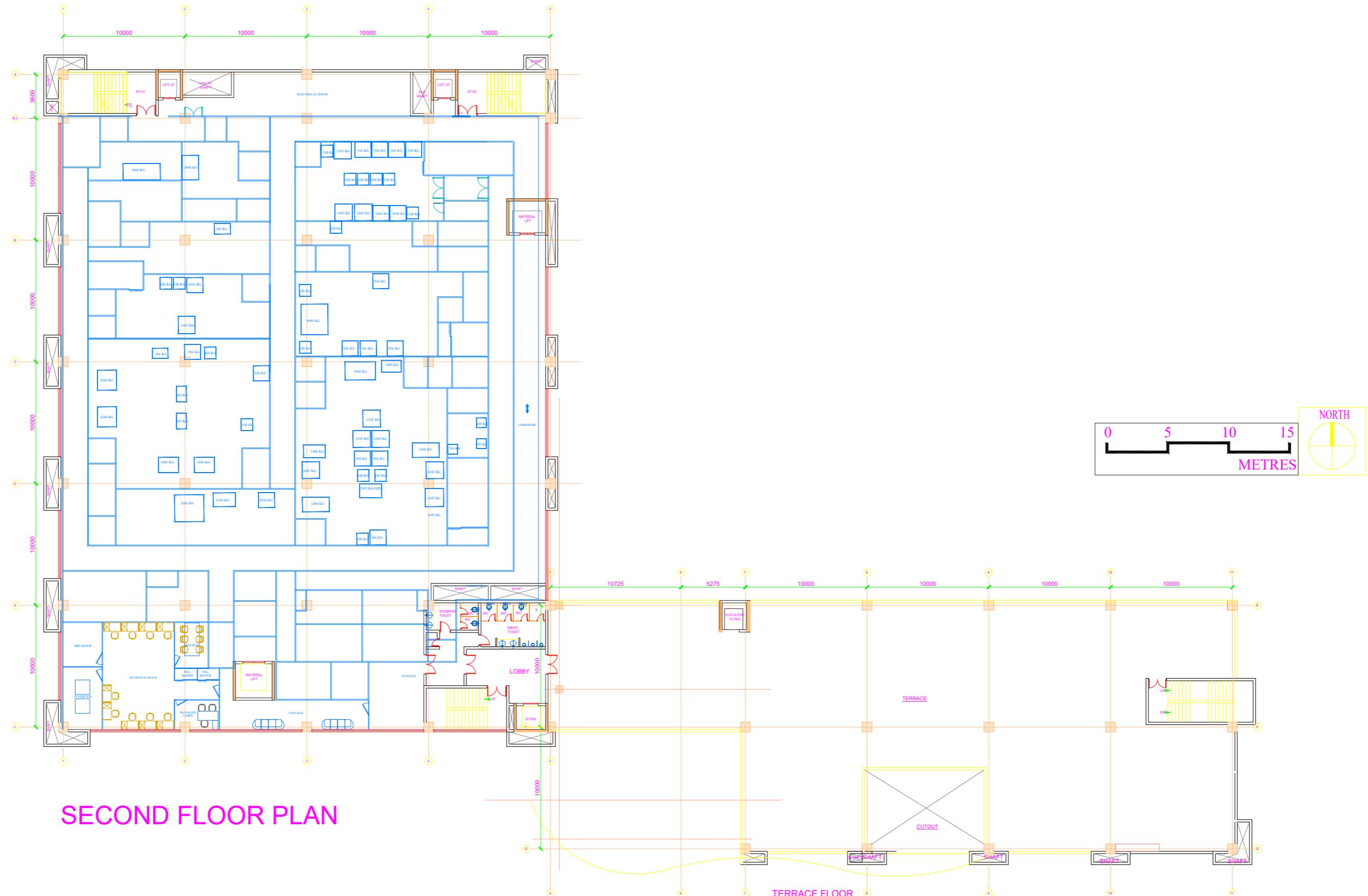
FIRST FLOOR PLAN

WORK CONTRIBUTION:

- 1) Combining manufacturing layouts given by Stella Polaris with floor plans of Manufacturing and Admin blocks.

SOFTWARE USED:

- ## 1) AutoCAD



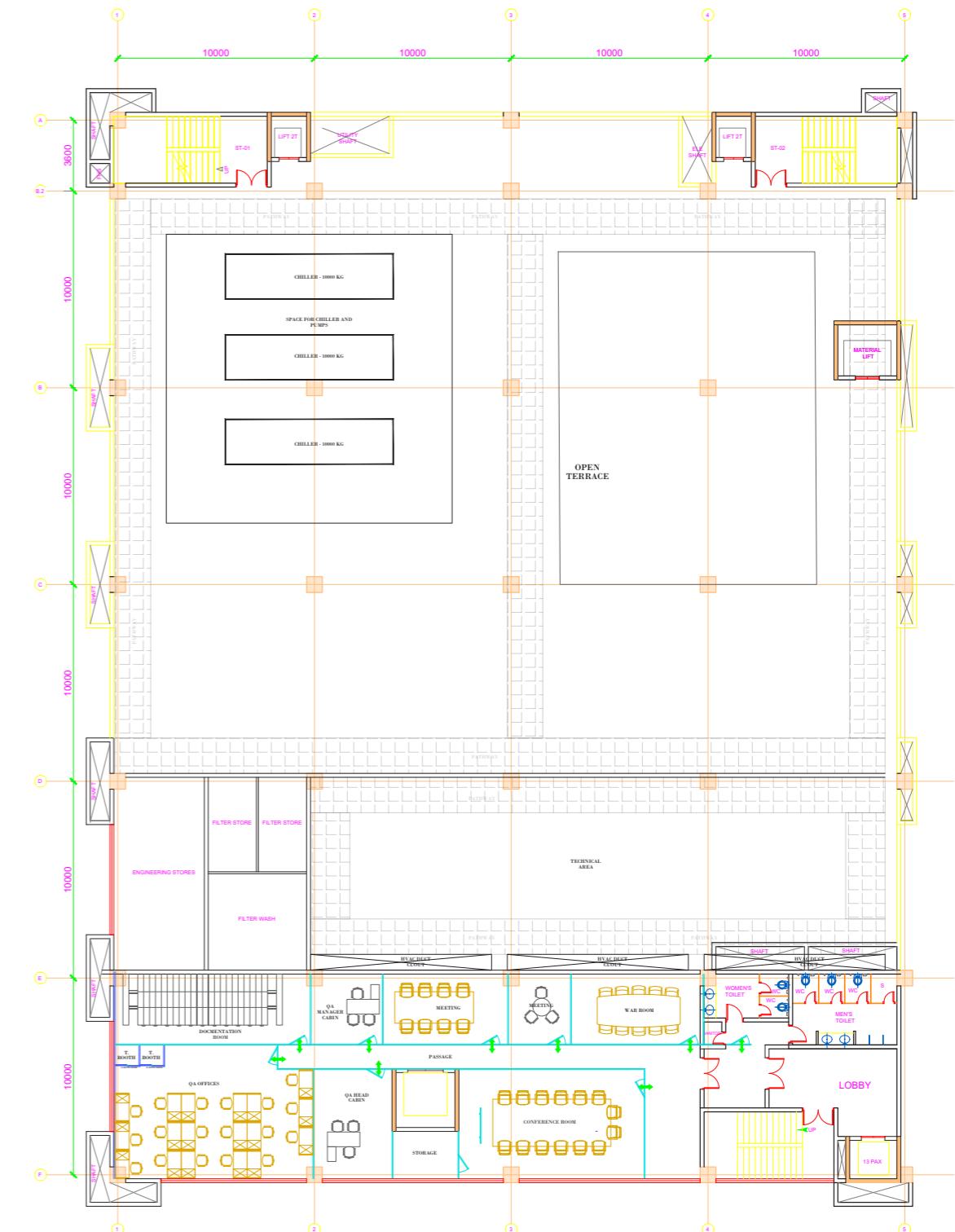
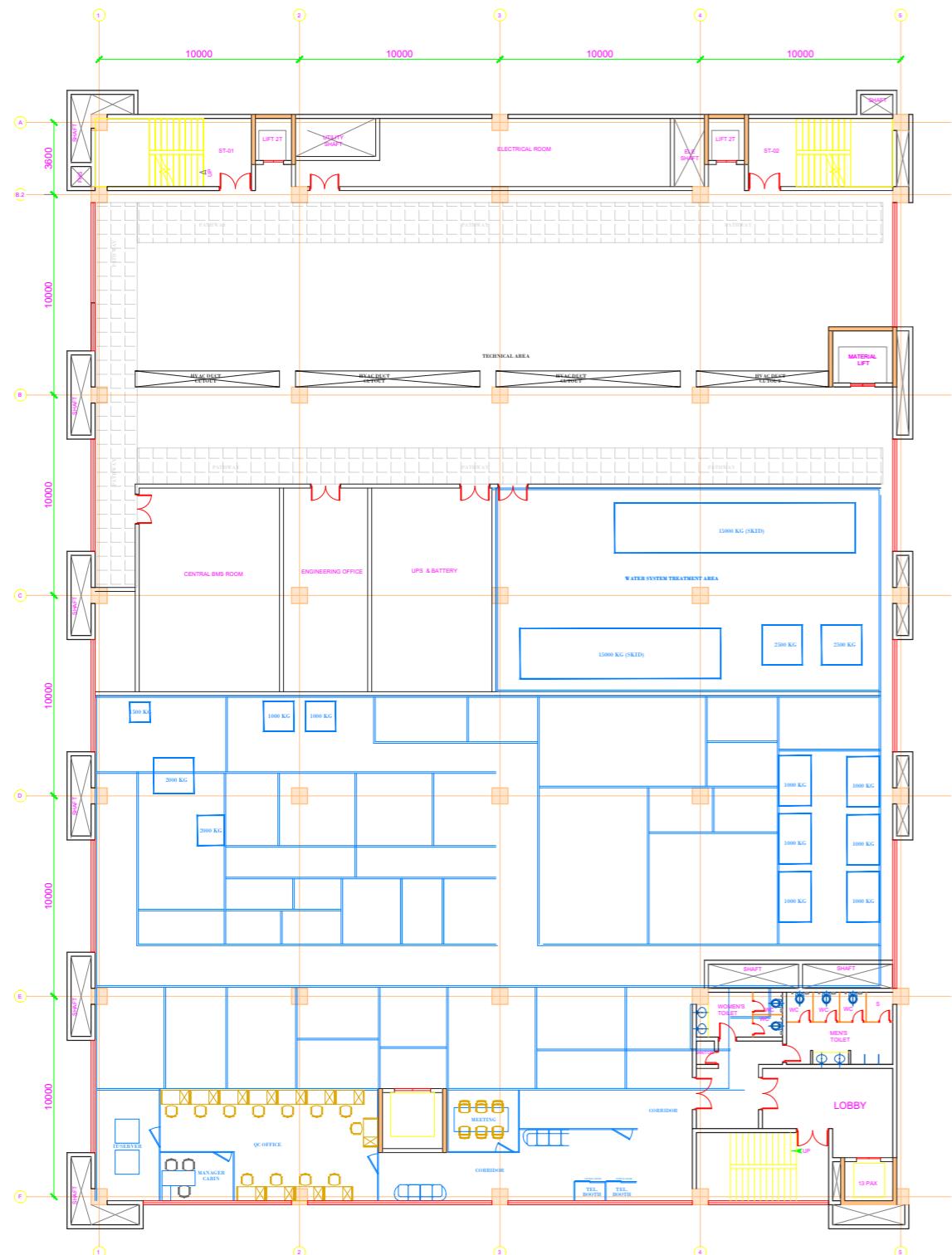
SECOND FLOOR PLAN

WORK CONTRIBUTION:

- 1) Combining manufacturing layouts given by Stella Polaris with floor plans of Manufacturing and Admin blocks.

SOFTWARE USED:

- 1) AutoCAD



WORK CONTRIBUTION:

- 1) Combining manufacturing layouts given by Stella Polaris with floor plans of Manufacturing and Admin blocks.

SOFTWARE USED:

- 1) AutoCAD

FACADE OPTION A



WORK CONTRIBUTION:

- 1) Modelled Omexa facade option A and created rendered images.

SOFTWARE USED:

- 1) Revit
- 2) SketchUp
- 3) D5 Render

FACADE OPTION B



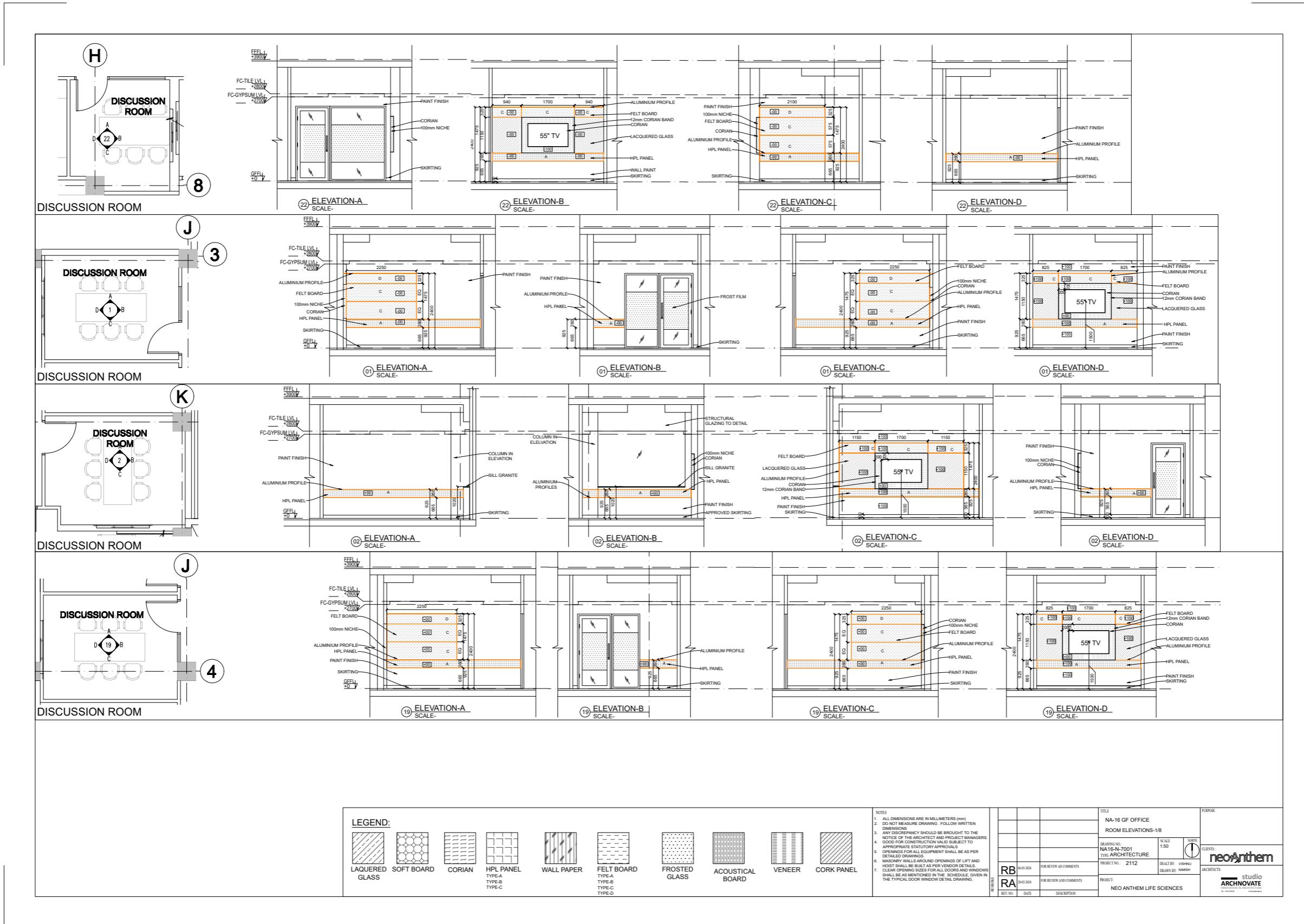
WORK CONTRIBUTION:

- 1) Modelled Omexa facade option B and created rendered images.

SOFTWARE USED:

- 1) Revit
- 2) SketchUp
- 3) D5 Render

NA16 OFFICE INTERIORS



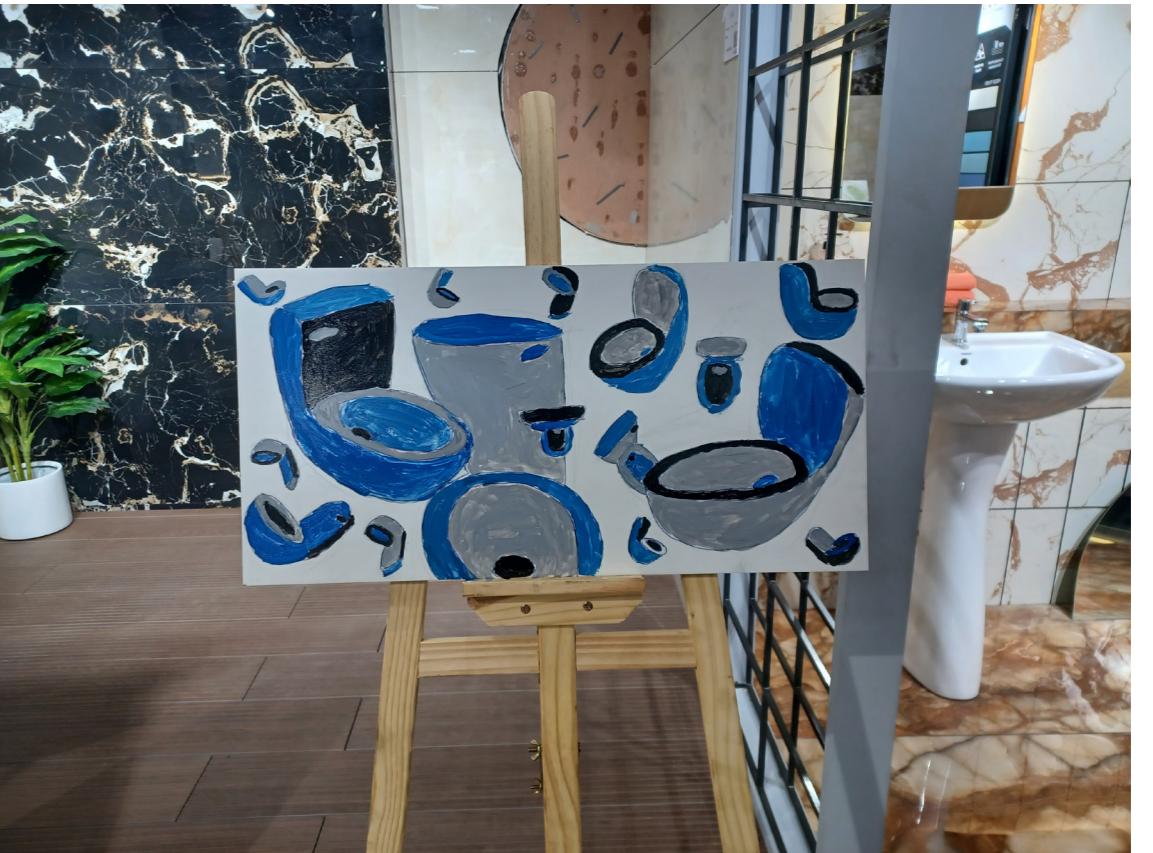
WORK CONTRIBUTION:

- 1) Helped in making elevation drawings in AutoCad.
- 2) Learned about the most commonly used materials for office interior design.

SOFTWARE USED:

- 1) AutoCad

JOHNSON TILES WORKSHOP



TASK:

- 1) Design and paint a tile. Explain your design in terms of functionality and usage to a group of jurors.