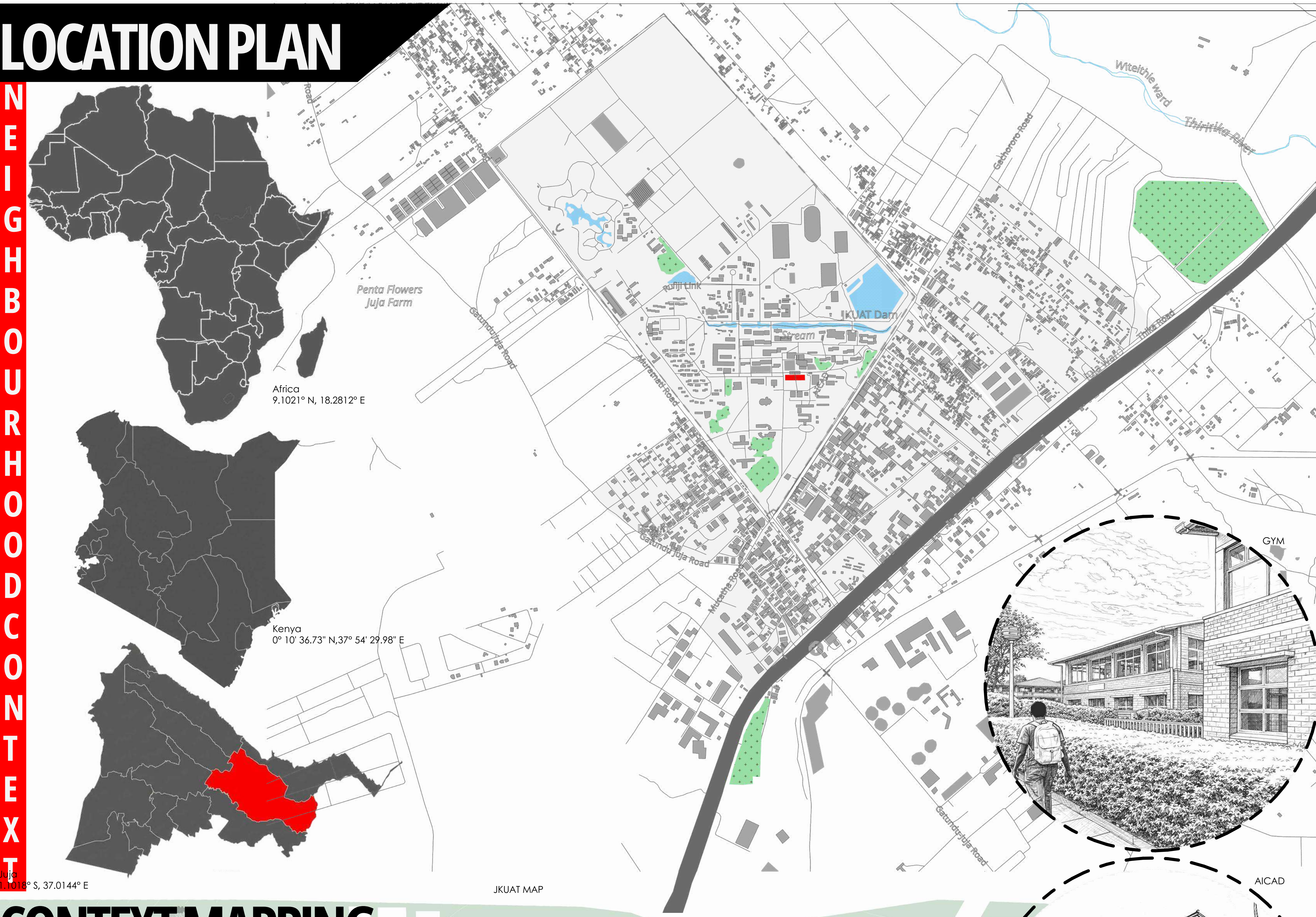


LOCATION PLAN

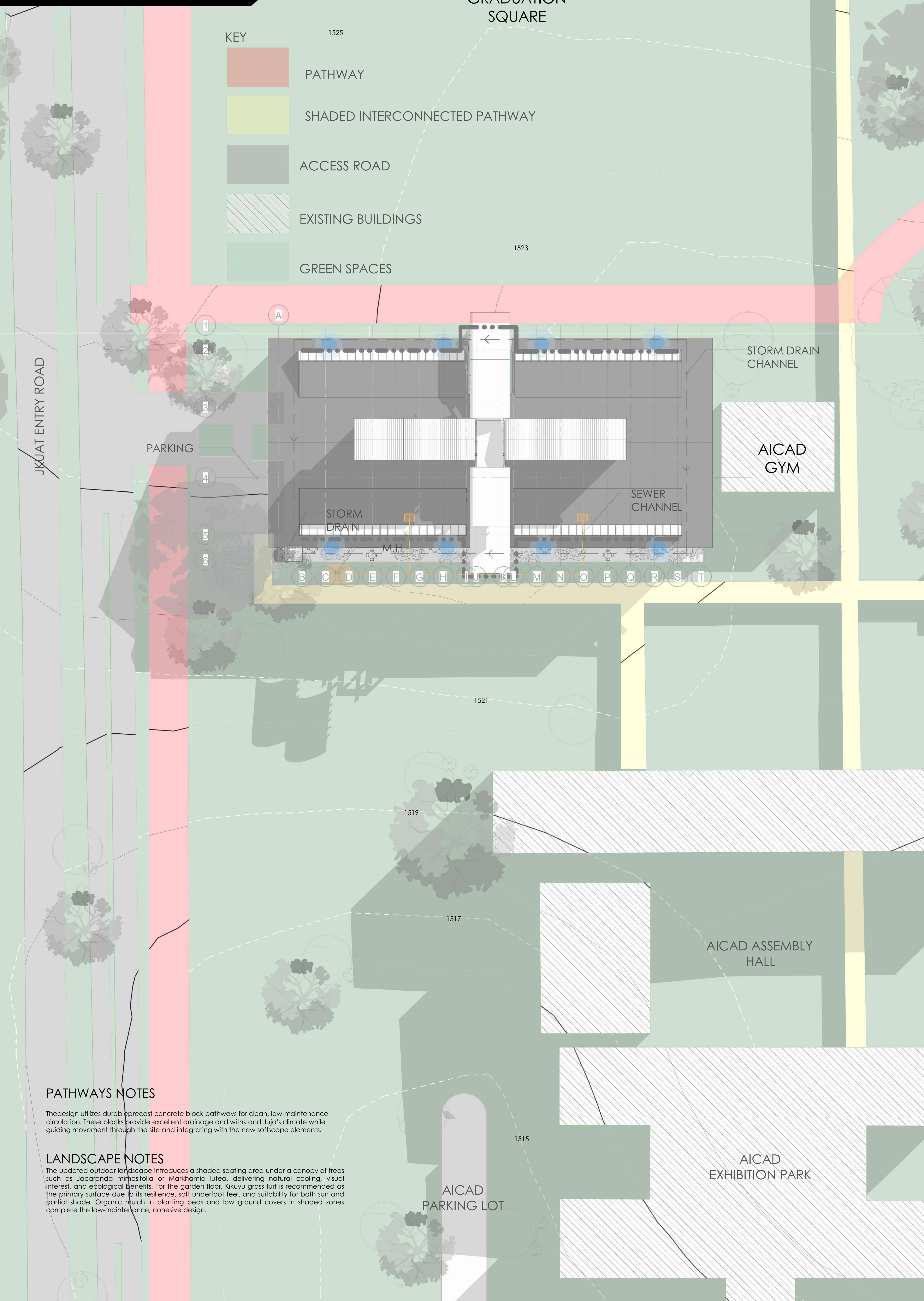
NEIGHBOURHOOD CONTEXT



CONTEXT MAPPING



SITE PLAN



TOPIC;

NET-ZERO RETROFITTING THROUGH ADAPTIVE REUSE: A
CARBON-NEUTRAL STRATEGY FOR THE JKUAT LIBRARY
IN JUJA, KENYA.

PROJECT;

UNIVERSITY LIBRARY

PROBLEM;

ADAPTIVE PERFORMANCE

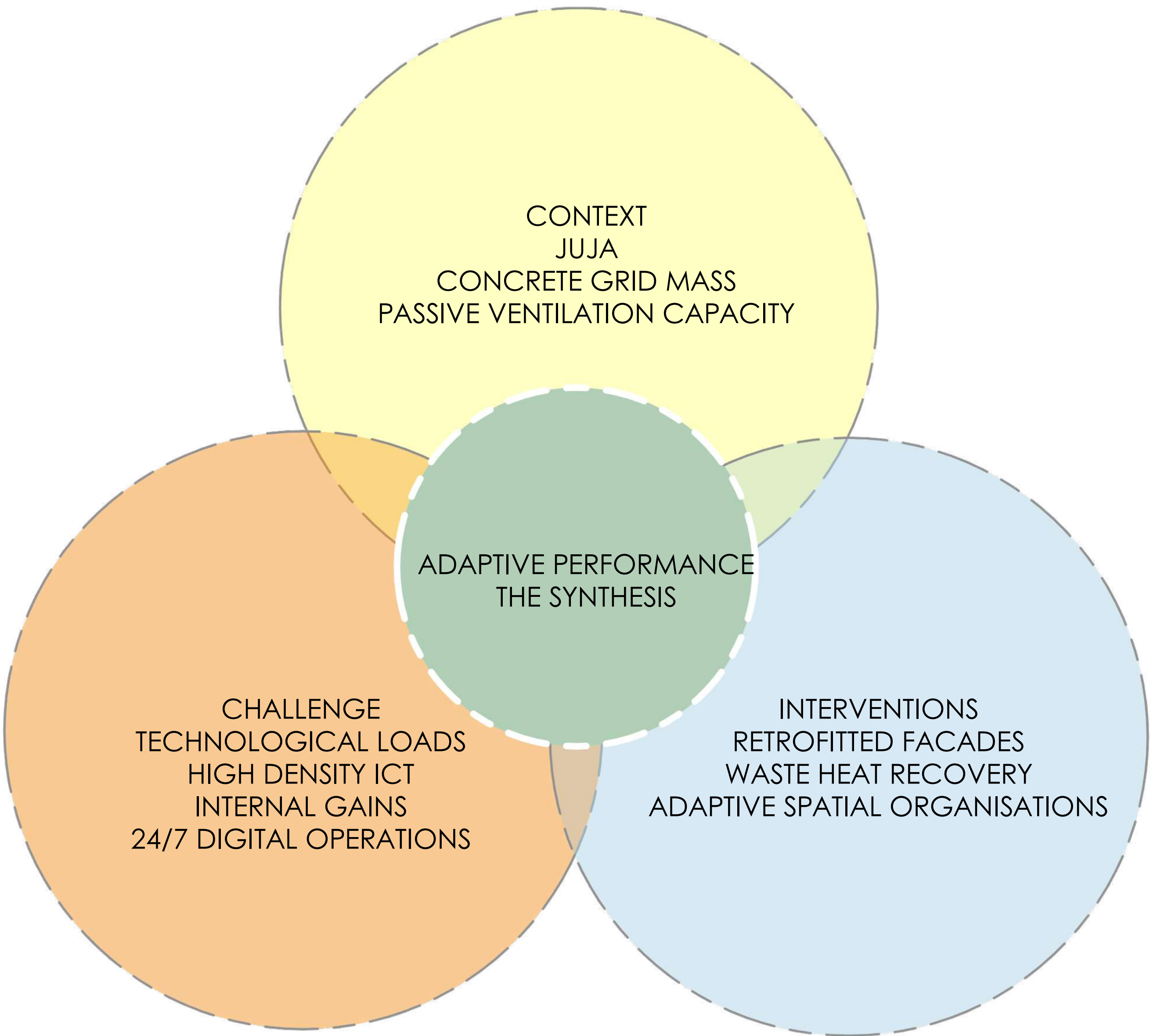
PROBLEM STATEMENT;

THE JKUAT LIBRARY IS A PRIME EXAMPLE OF BRUTALIST-INSPIRED TROPICAL ARCHITECTURE,RELYING ON HIGH THERMAL MASS AND CROSS-VENTILATION TO MAINTAIN ENVIRONMENTAL STABILITY. HOWEVER,THE BUILDING'S CURRENT ADAPTIVE REUSE,SHIFTING FROM A STATIC BOOK REPOSITORY TO A HIGH-DENSITY, ICT-INTENSIVE LEARNING COMMONS,HAS INTRODUCED SIGNIFICANT INTERNAL HEAT GAINS FROM SERVERS AND MOBILE DEVICES THAT THE ORIGINAL PASSIVE ENVELOPE WAS NOT PROGRAMMED TO MITIGATE. THIS CREATES A PERFORMANCE GAP WHERE USERS FACE LOCALIZED THERMAL DISCOMFORT, LEADING TO A POTENTIAL RELIANCE ON ENERGY-INTENSIVE MECHANICAL COOLING.

THIS RESEARCH INVESTIGATES ARCHITECTURAL RETROFITTING INTERVENTIONS,SPECIFICALLY BIOCLIMATIC SKINS AND WASTE-HEAT RECOVERY,TO RESTORE THE BUILDING'S THERMAL EQUILIBRIUM AND ACHIEVE A NET-ZERO OPERATIONAL FOOTPRINT.

VARIABLES;

INDEPENDENT VARIABLES	DEPENDENT VARIABLES	CONTEXT VARIABLE
ARCHITECTURAL RETROFITTING MEASURES BUILDING INTERGRATED PHOTOVOLTAICS DOUBLE SKIN FACADES LOCALIZED SERVERS	BUILDING PERFORMANCE METRICS INDOOR AIR QUALITY THERMAL COMFORT	THE JUJA MICROCLIMATE HIGH SOLAR RADIATION MODERATE HUMIDITY STRUCTURAL GRID



HISTORY

GENERAL CHARACTER



WAYFINDING

INTERACTIVE ART

VISUAL CONTRAST

LOGIC

General Character & Logic
Principles: Defined by Functional Clarity and Environmental Logic—prioritizing modesty over ornament.
Aesthetic: High precision in detailing with a rhythmic facade.
Modifications: Security concerns led to "secondary entrance grilles" and "bottom mesh" installations, which have now become permanent features of the building's visual and functional character.

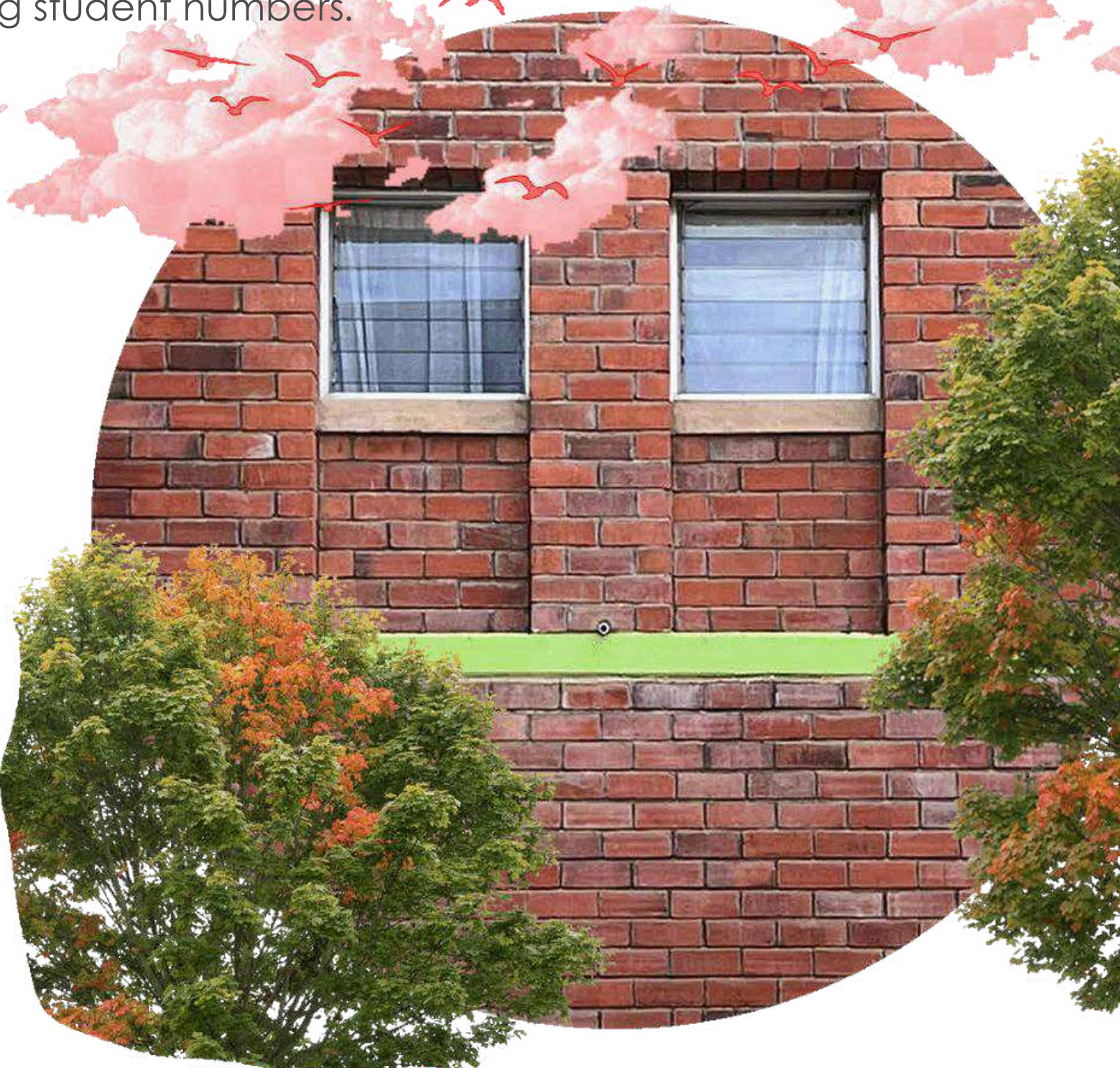


FUTURE PLANNING

Digitalization: Full transition to a digital library system to reduce physical storage needs.
Expansion: A strategic goal to triple capacity from 200 to 600 students.
Functional Rebirth: Redesigning "squeezed" zones into dedicated spaces for Relaxation, Research, and Group Discussion, supported by a critical power and Wi-Fi infrastructure overhaul.

ADAPTIVE REUSE

Origin: Established in 1981 as a college library; upgraded to university status in 1994.
Design: Funded by Sumitomo Corp, utilizing Japanese Institutional Architecture focused on structural discipline.
Evolution: Originally a small-scale COHRED library, it has undergone forced "adaptive reuse," converting seminar rooms into offices and using temporary woodwork partitions to manage growing student numbers.



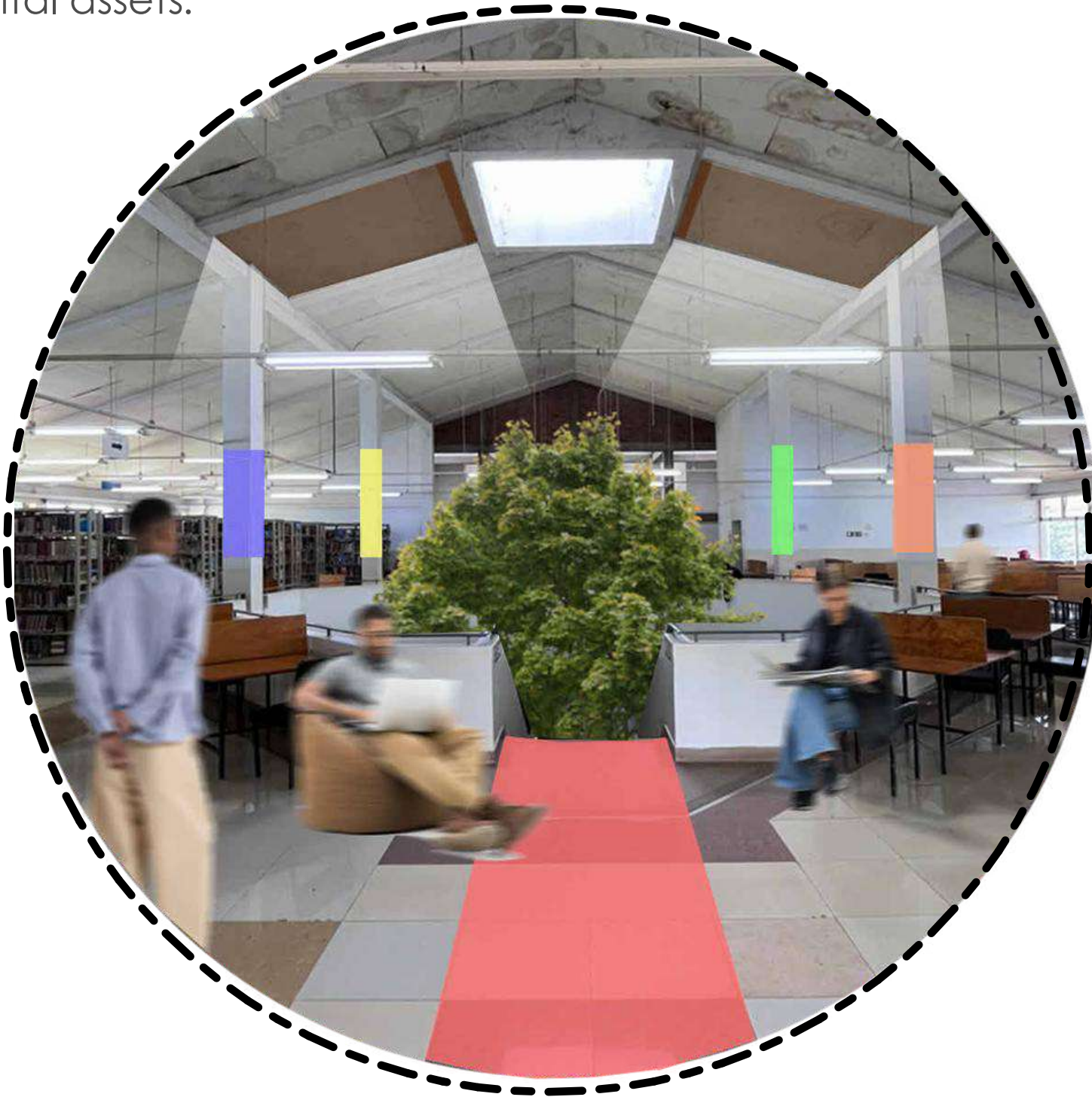
1990s

'OLD' VS 'NEW'

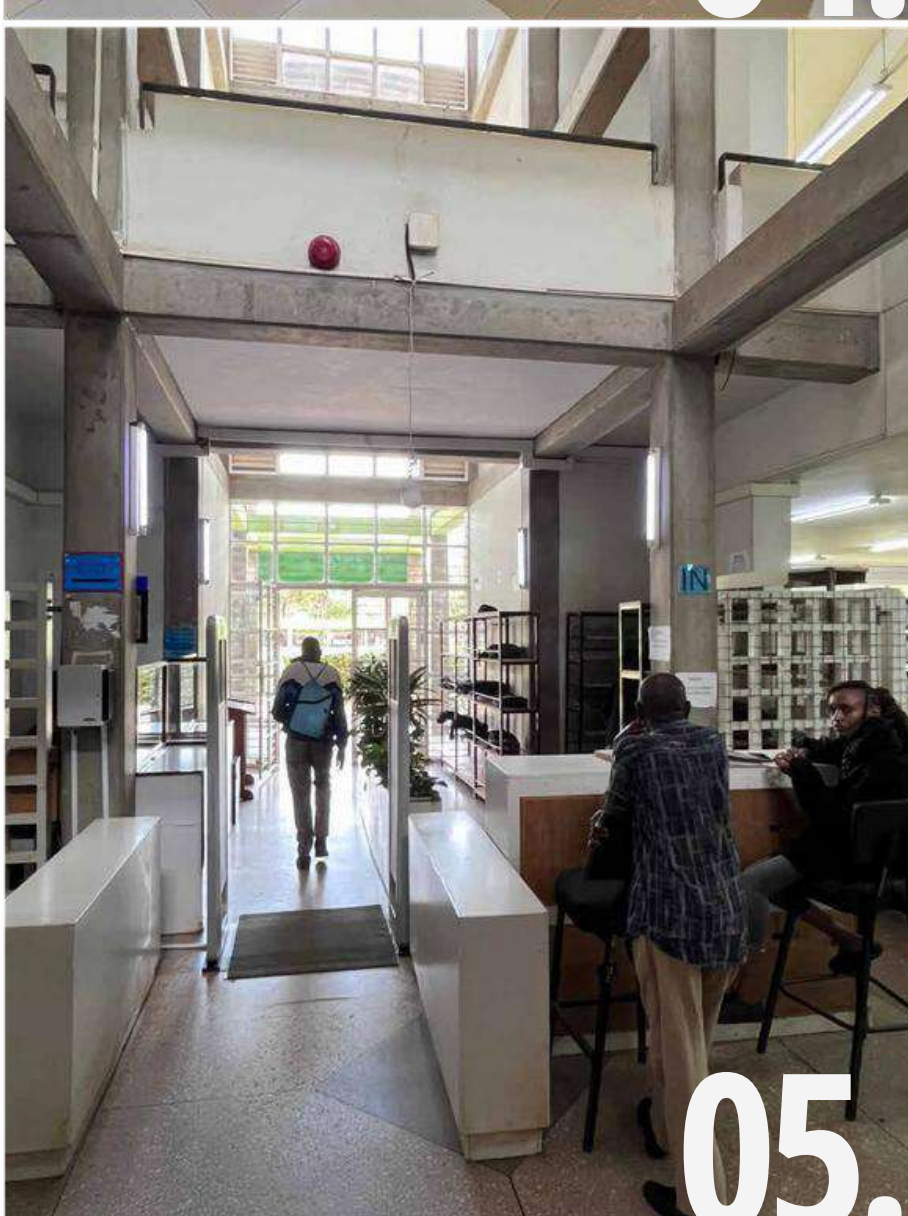
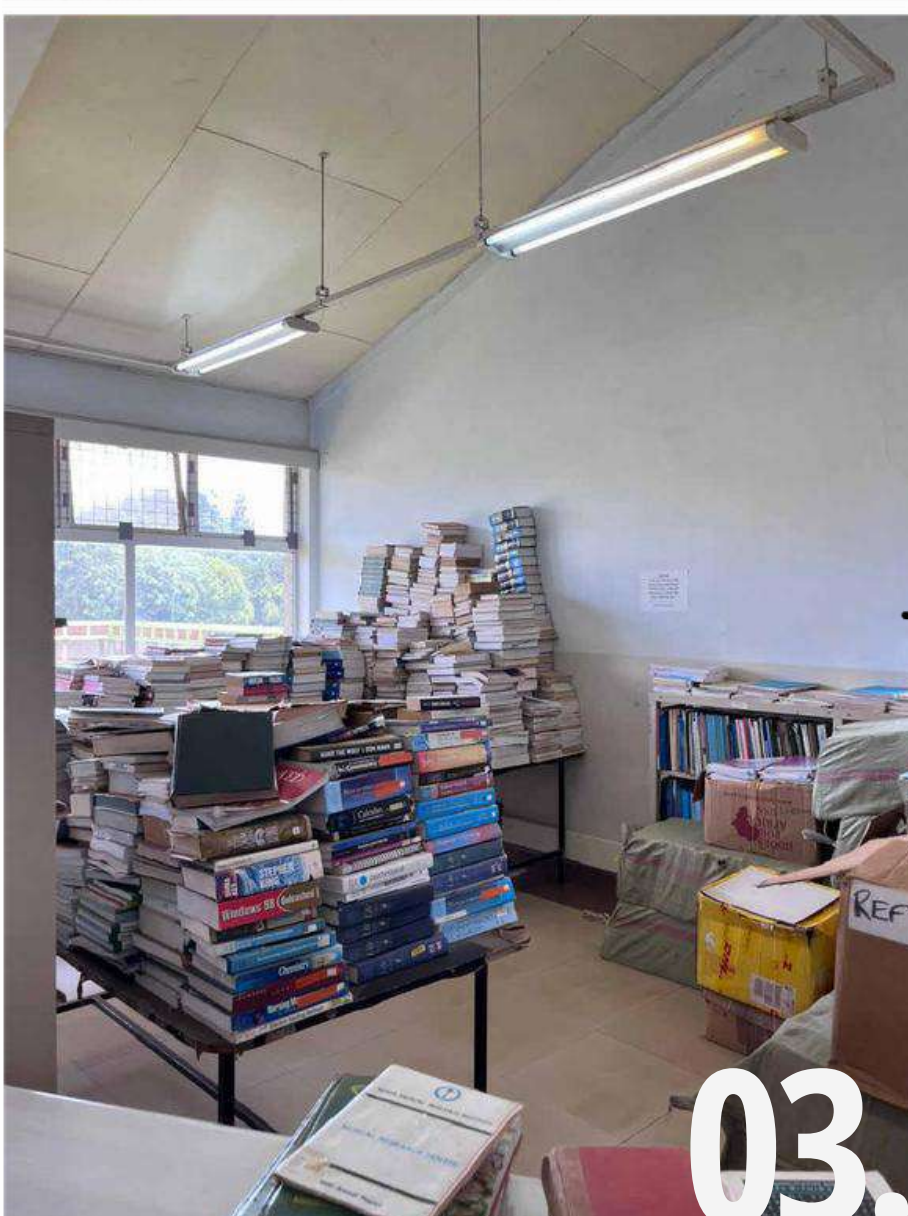
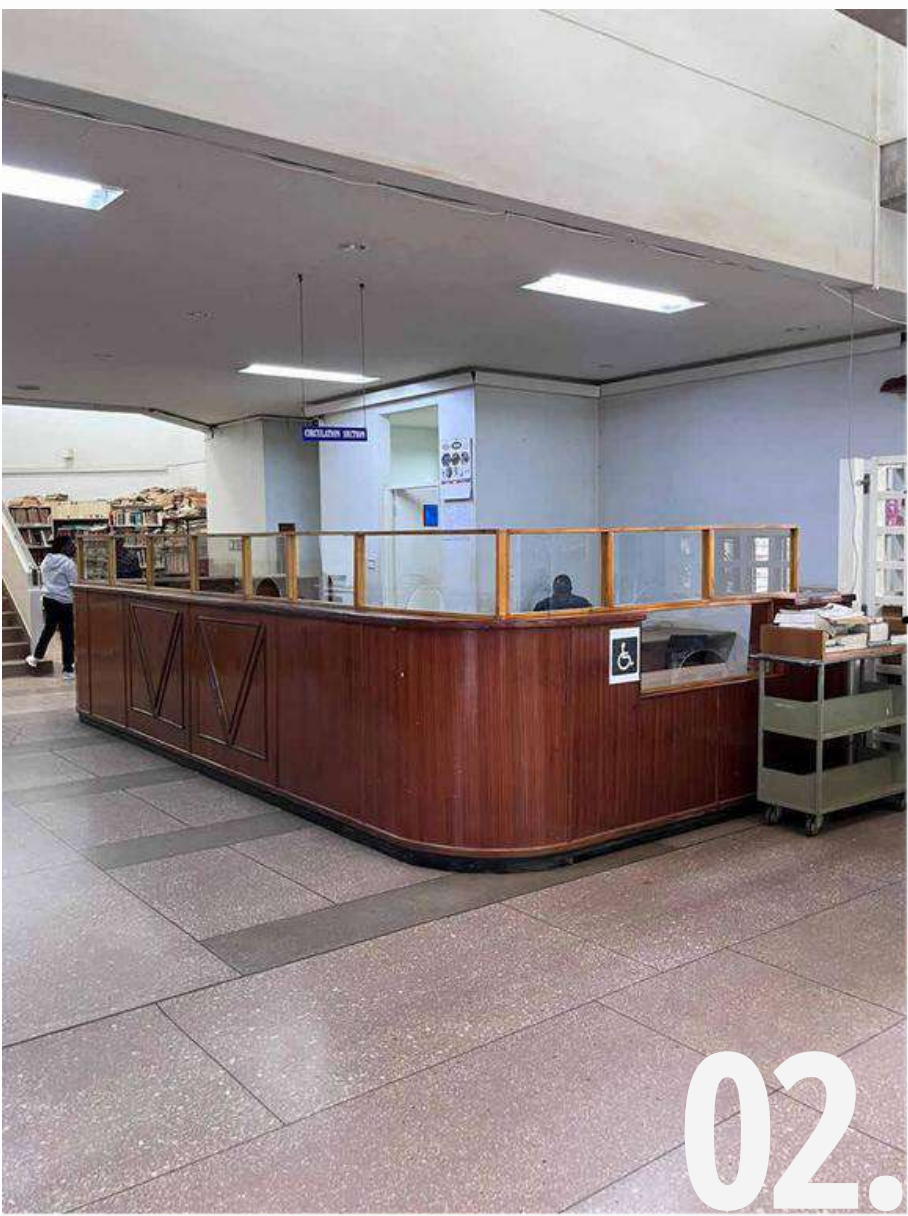
The Conflict: The "Old" footprint (designed for 200 students) is now "squeezed" by modern "New" demands.
Resource Shift: Transitioning from traditional Bindery/Processing to a digital-first approach with MyLoFT registration and computerized gadgets for visually impaired users.
Infrastructure Strain: Original structural pillars now hinder open-plan modern layouts, and aging roofing requires ongoing renovation to protect digital assets.

1990s-2025

2026



INTERIOR



01.

THE MASONRY WALLS SHOW SIGNIFICANT VERTICAL AND HORIZONTAL JOINT LINES, LIKELY INDICATING THE INTERFACE BETWEEN DIFFERENT STRUCTURAL PHASES OR INFILL PANELS

SURFACE FINISHING IS DEGRADED, WITH VISIBLE STAINING THAT SUGGESTS A LACK OF CLIMATE CONTROL OR MOISTURE PENETRATION FROM THE BUILDING ENVELOPE.

02.

THE MAIN HALL IS DEFINED BY A LOW-PROFILE SUSPENDED CEILING SYSTEM INTEGRATED WITH RECESSED FLUORESCENT LIGHTING AND HEAVY TIMBER-CLAD MILLWORK AT THE SERVICE DESK.

STRUCTURAL LOAD-BEARING IS HANDLED BY A LARGE-SPAN REINFORCED CONCRETE BEAM VISIBLE IN THE BACKGROUND, WHICH FACILITATES THE TRANSITION TO THE TALLER ATRIUM SPACE

03.

THIS SPACE DEMONSTRATES A SLOPED CEILING ASSEMBLY COMPOSED OF LIGHTWEIGHT ACOUSTIC PANELS SUPPORTED BY A SECONDARY STEEL SUSPENSION SYSTEM. SIGNIFICANT DEAD-LOADING IS PRESENT DUE TO THE DISORGANIZED STACKING OF LIBRARY MATERIALS, WHICH MAY EXCEED THE ORIGINAL DESIGN LIVE-LOAD CAPACITY FOR THIS SPECIFIC FLOOR ZONE.

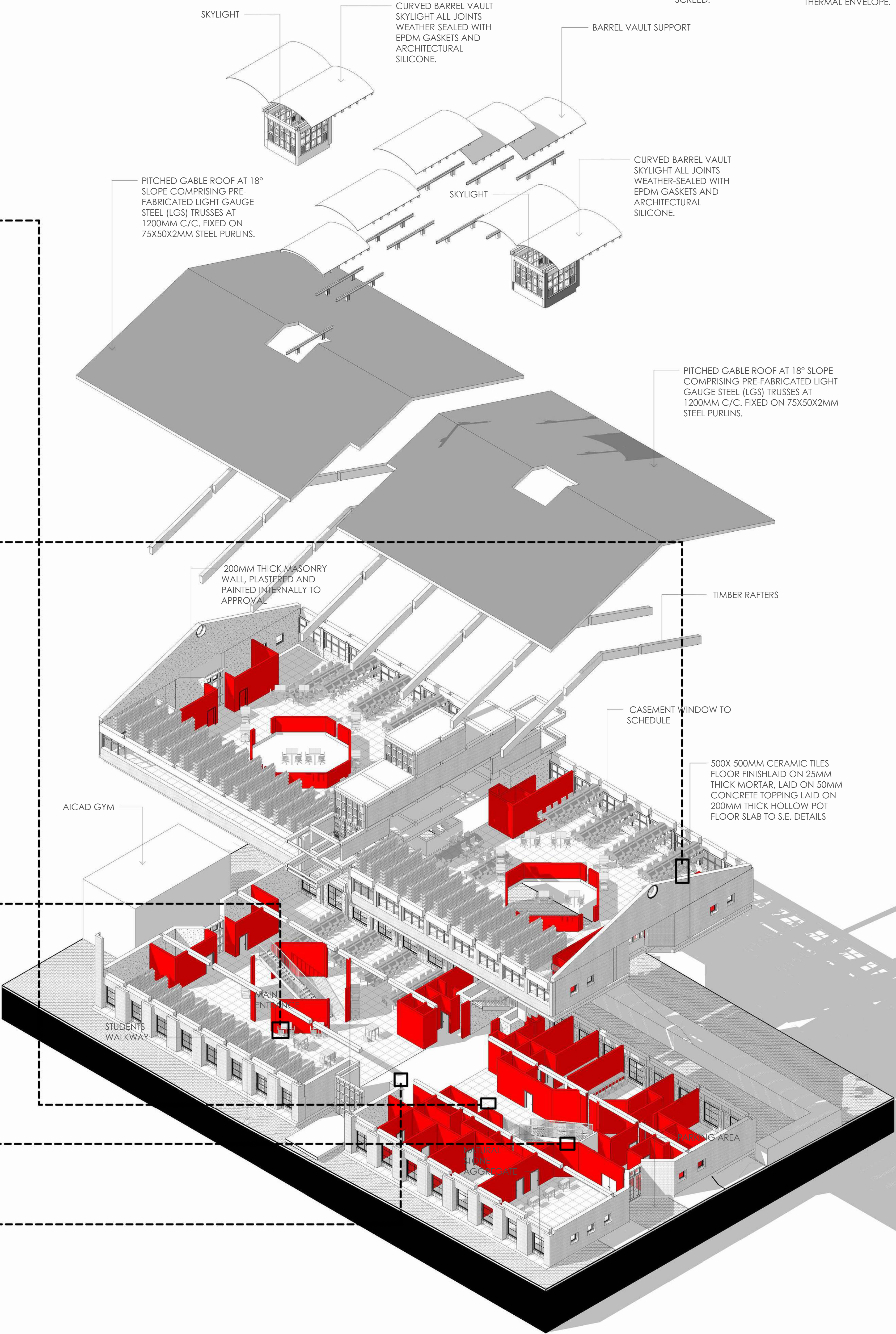
LARGE-SCALE GLAZING IS INTEGRATED VIA AN ALUMINUM-FRAMED RIBBON WINDOW, WHERE THE HEAD OF THE FRAME MEETS THE STRUCTURAL SOFFIT, A COMMON POINT FOR POTENTIAL THERMAL BRIDGING.

04.

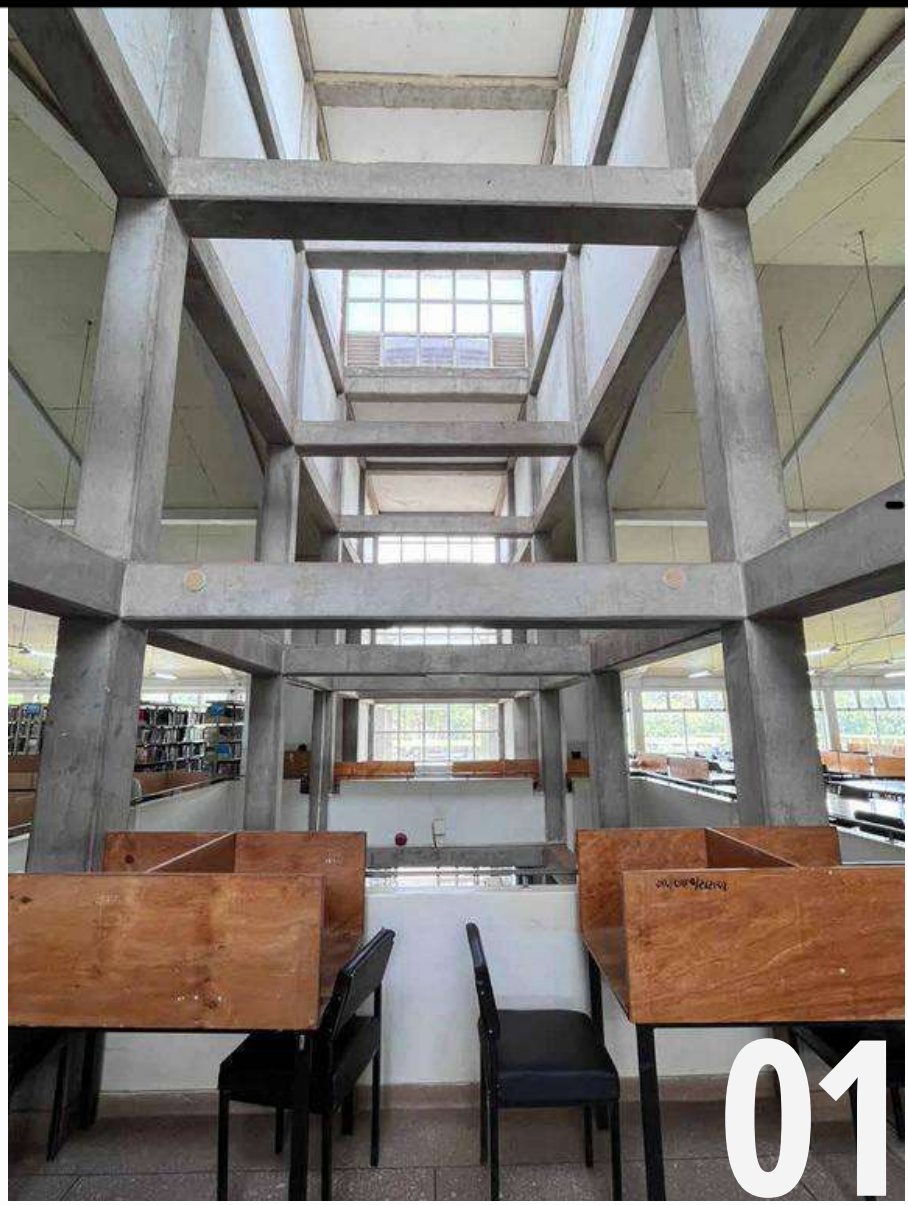
THE PRIMARY LIBRARY STACKS ARE ARRANGED IN A GRID THAT ALIGNS WITH THE OVERHEAD STRUCTURAL BAYS, UTILIZING INDUSTRIAL-GRADE STEEL SHELVING BOLTED TO THE FLOOR FOR LATERAL STABILITY. THE CEILING IS A FLAT-SLAB CONCRETE CONSTRUCTION WITH A PLASTER FINISH, SHOWING LOCALIZED DISCOLORATION NEAR THE FLUORESCENT FIXTURES THAT MAY INDICATE ELECTRICAL HEAT STRESS OR MINOR ROOF LEAKS. CLEAR CIRCULATION PATHS ARE MAINTAINED, THOUGH THE REFLECTIVE FLOOR FINISH HIGHLIGHTS MINOR SURFACE IRREGULARITIES IN THE UNDERLYING CONCRETE SCREED.

05.

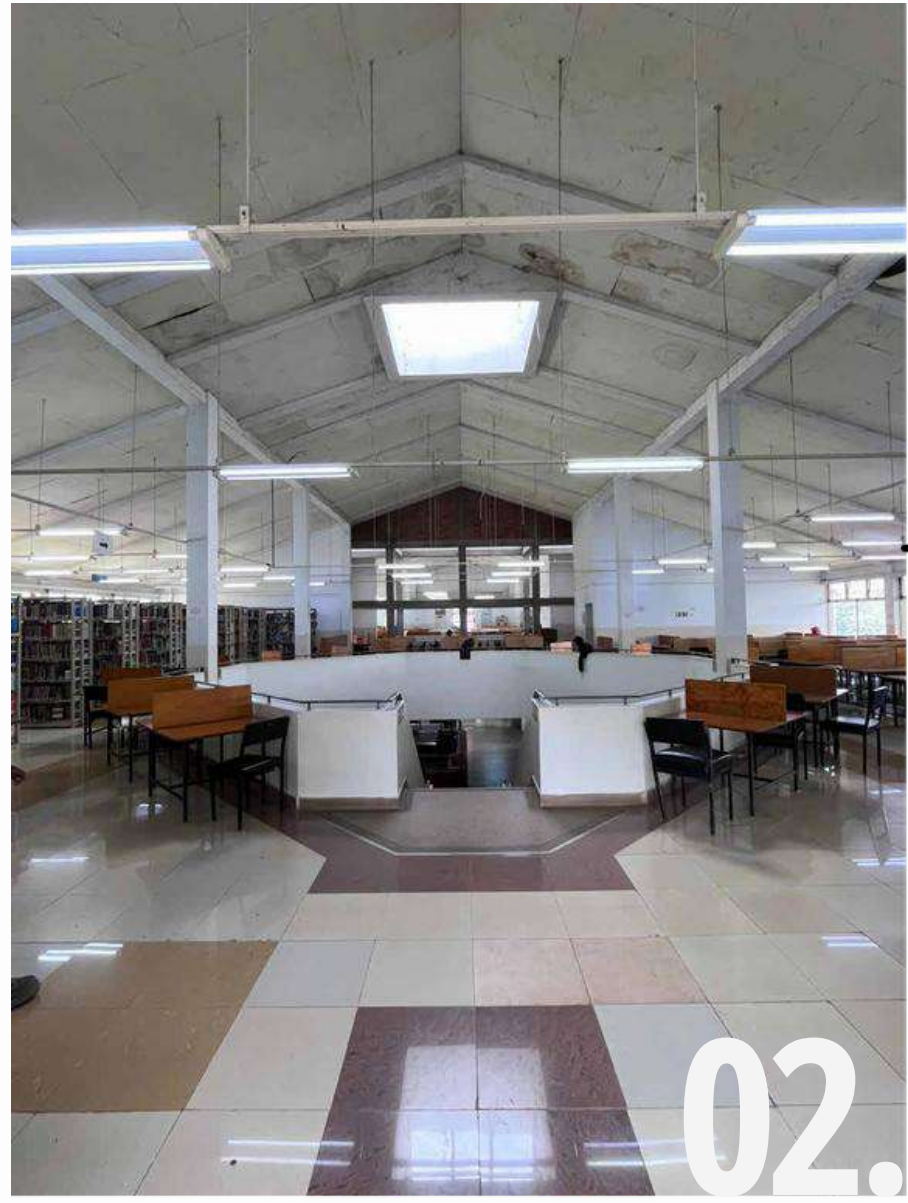
THE ENTRANCE SEQUENCE IS DEFINED BY A HEAVY REINFORCED CONCRETE POST-AND-BEAM FRAME, FEATURING EXPOSED COLUMNS THAT SUPPORT A DOUBLE-HEIGHT ATRIUM TRANSITION. A SUBSTANTIAL HORIZONTAL CONCRETE LINTEL SPANS THE DOORWAY, ACTING AS BOTH A STRUCTURAL TIE AND A MOUNTING SURFACE FOR FIRE SAFETY SYSTEMS AND SECURITY SENSORS. THE VERTICALITY OF THE SPACE IS ACCENTUATED BY CLERESTORY WINDOWS ABOVE THE ENTRY, WHICH PROVIDE NATURAL LIGHT TO THE STRUCTURAL MEMBERS WHILE MAINTAINING THE BUILDING'S THERMAL ENVELOPE.



STRUCTURE



01.



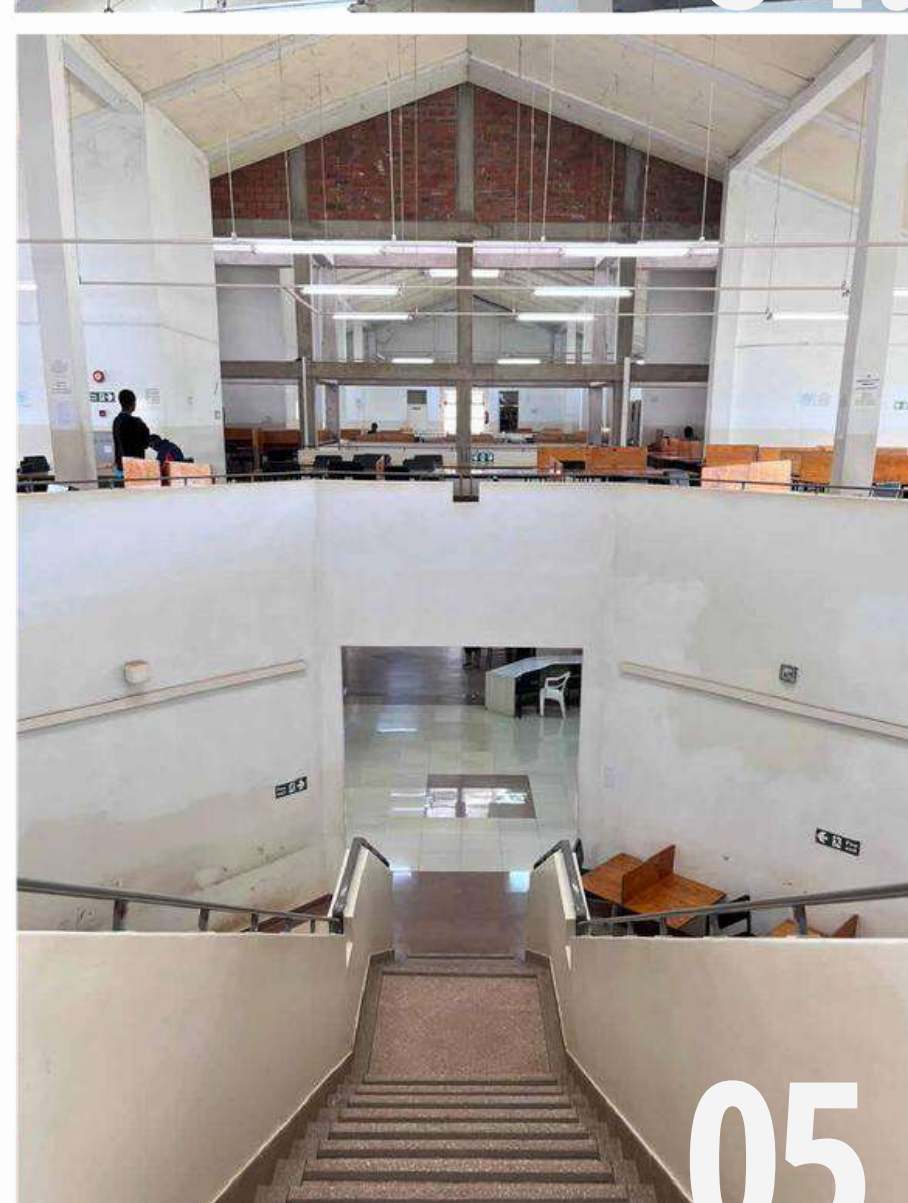
02.



03.



04.



05.

01.

STRUCTURALLY STABLE 300 MM BY 300MM REINFORCED CONCRETE COLUMNS

EXPOSED CONCRETE SURFACES ARE UNREACHABLE TO CLEAN AND MAINTAIN SPACE COULD BE UTILISED.

02.

CEILING BOARDS ARE ROTTING DUE TO RAIN INGRESS THIS COULD AFFECT ELECTRICAL SYSTEMS AT THE ROOF

CEILING BOARDS ARE LOOSELY FITTING BECAUSE OF ROT AND BECAUSE CEILINGS ARE REALLY HIGH MAINTAINANCE IS DIFFICULT. ROOF COVER AND TIMBER RAFTERS ARE ALSO ROTTING

03.

WIDE CIRCULATION SPACE FOR THE MAIN MOVEMENT AREAS 500MM BY 500MM NON SLIP CERAMIC TILES COLOUR CODED FOR WAYFINDING

PRESENCE OF ARTIFICIAL LED LIGHTING- LEFT ON DURING THE DAY THOUGH THE PLACE IS WELL LIT CAUSING SOME AREAS TO EXPERIENCE GLARE

04.

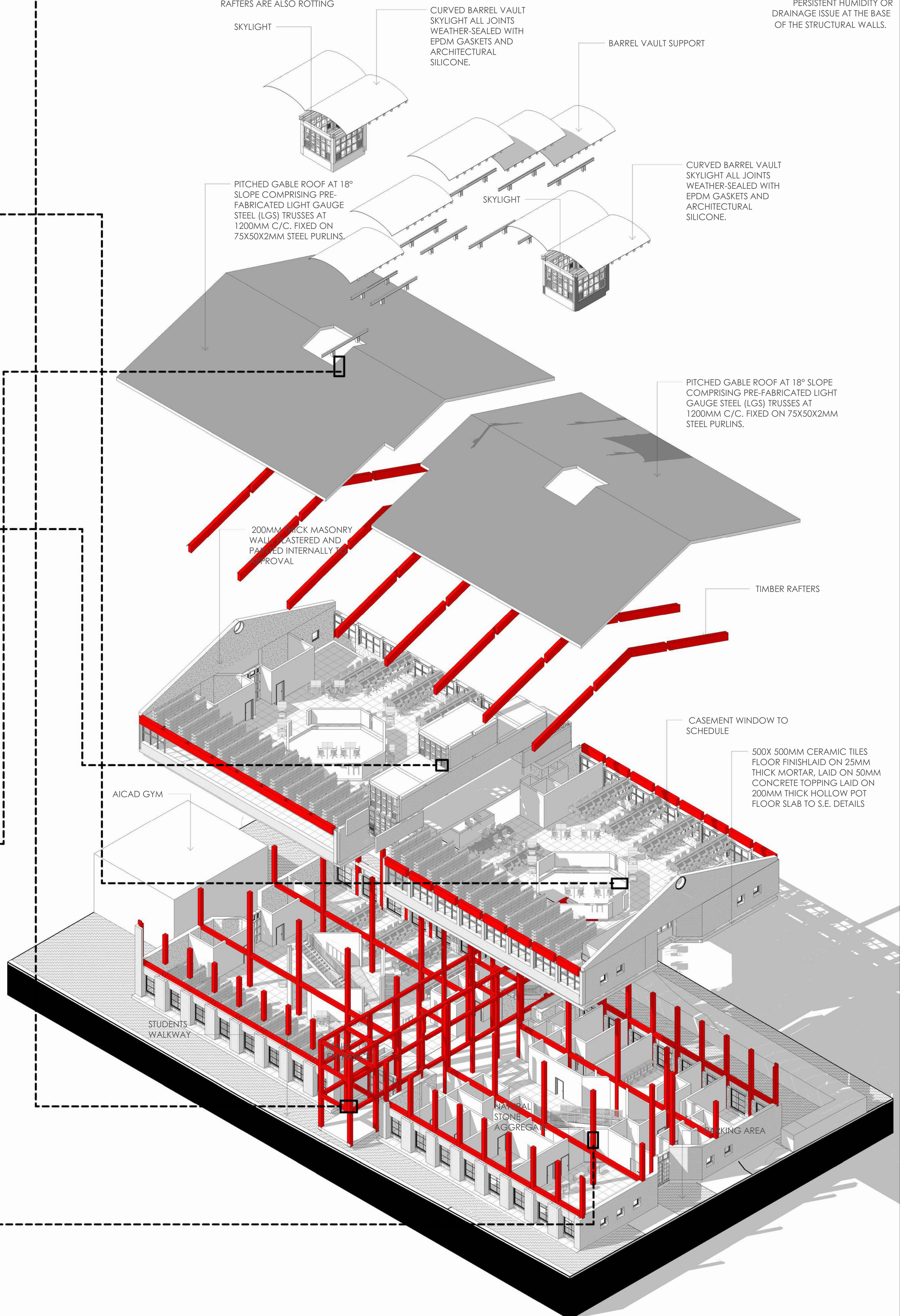
INTERIOR VIEW OF THE ROOF LIGHTING , MAXIMISING ON NATURAL DAYLIGHTING FRAME CONSTRUCTION: VISIBLE REINFORCED CONCRETE (RC) PORTAL FRAME OR BEAM-AND-COLUMN SYSTEM. SECONDARY FRAMING: INTERMEDIATE CONCRETE RIBS OR PURLINS SUPPORTING THE

ROOF/CEILING DECK. DECKING: PRECAST CONCRETE PANELS OR CEMENTITIOUS WOOD WOOL BOARDS (COMMON IN LIBRARIES FOR ACOUSTIC DAMPING) SPANNING BETWEEN THE RIBS.

05.

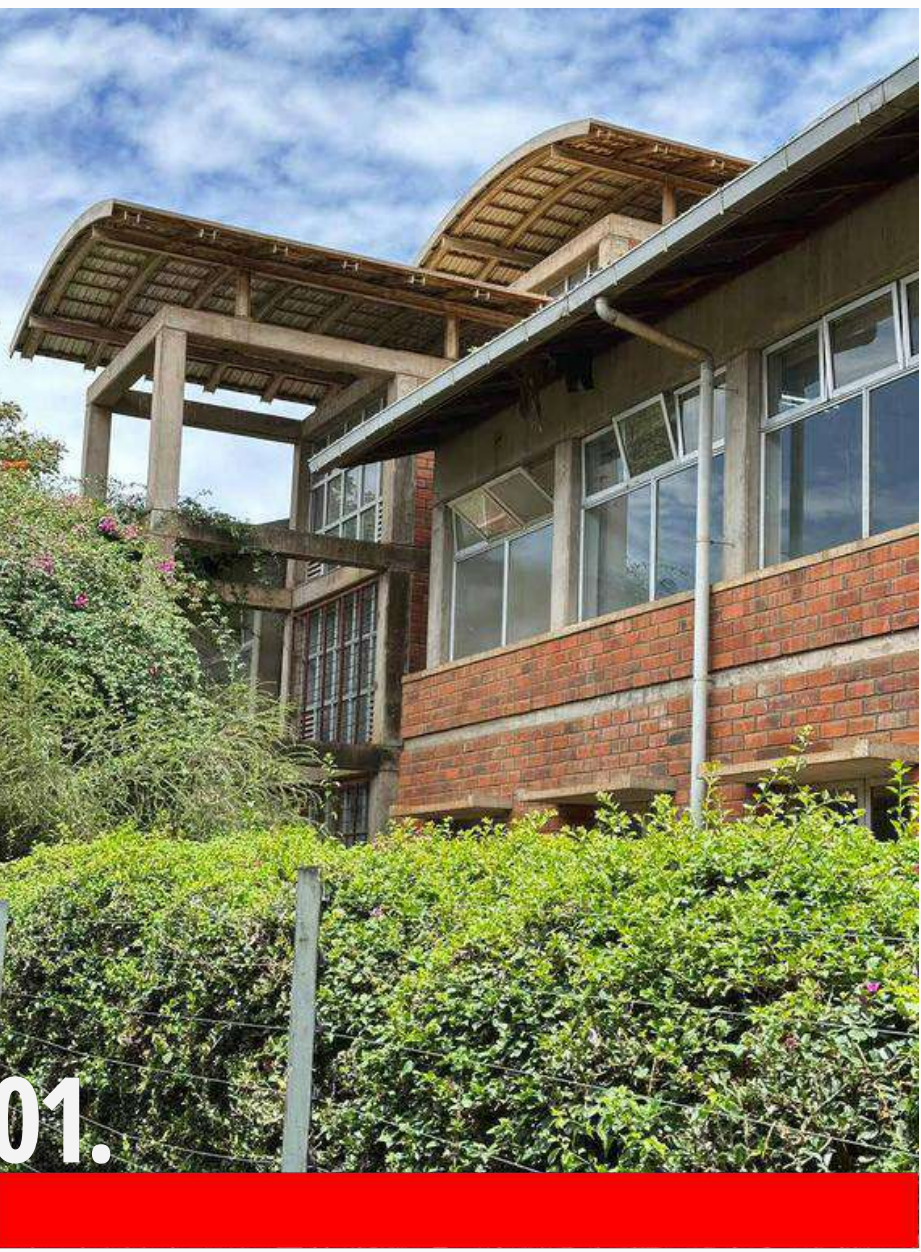
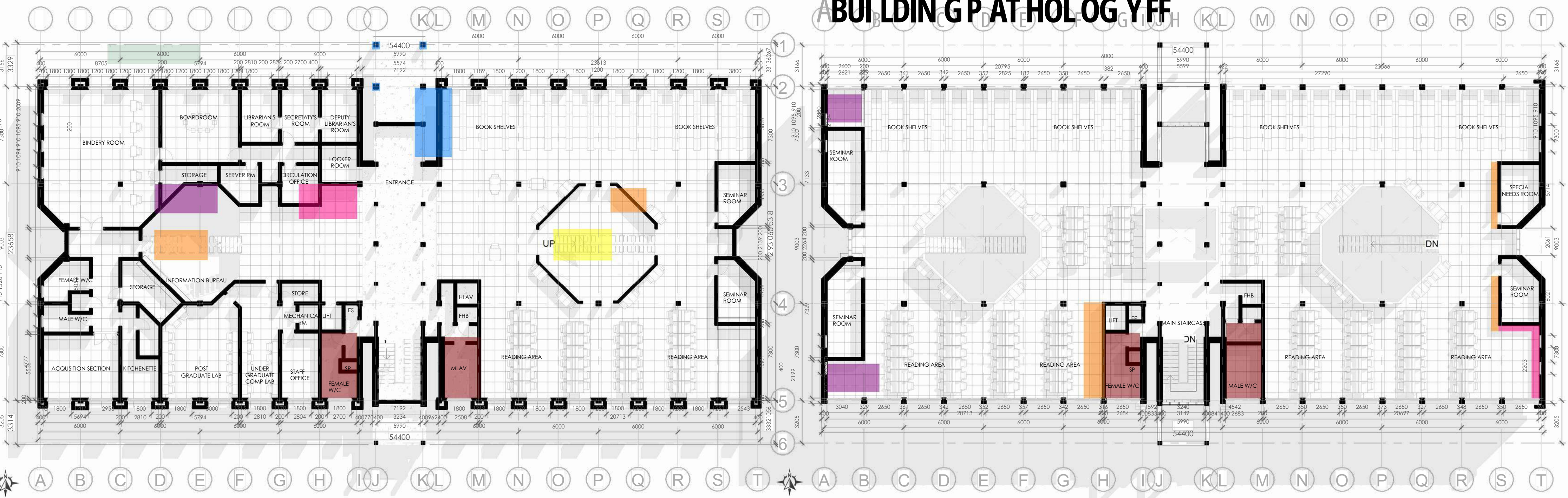
THE STRUCTURAL COMPOSITION OF THE INTERIOR TRANSITION SPACE FEATURES A REINFORCED CONCRETE STAIR ASSEMBLY LEADING INTO A MULTI-LEVEL ATRIUM, CHARACTERIZED BY A PITCHED-ROOF PORTAL FRAME SYSTEM WITH EXPOSED CONCRETE COLUMNS AND HIGH-LEVEL PERIMETER BEAMS.

THE OVERALL CONDITION INDICATES A NEED FOR MOISTURE BARRIER INSPECTION, AS THE LOCALIZED STAINING ON THE MASONRY AND CONCRETE FINISHES SUGGESTS A PERSISTENT HUMIDITY OR DRAINAGE ISSUE AT THE BASE OF THE STRUCTURAL WALLS.

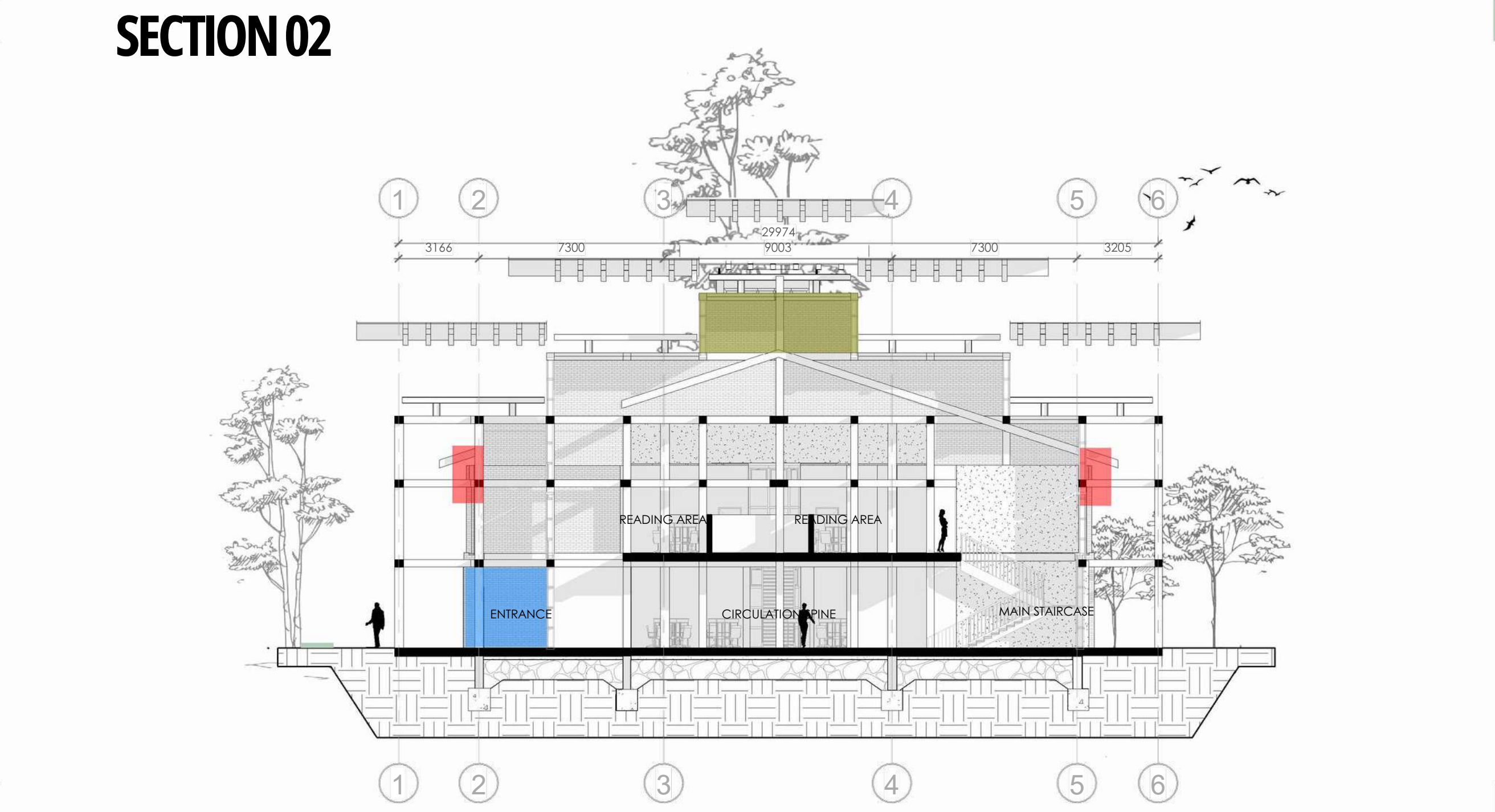
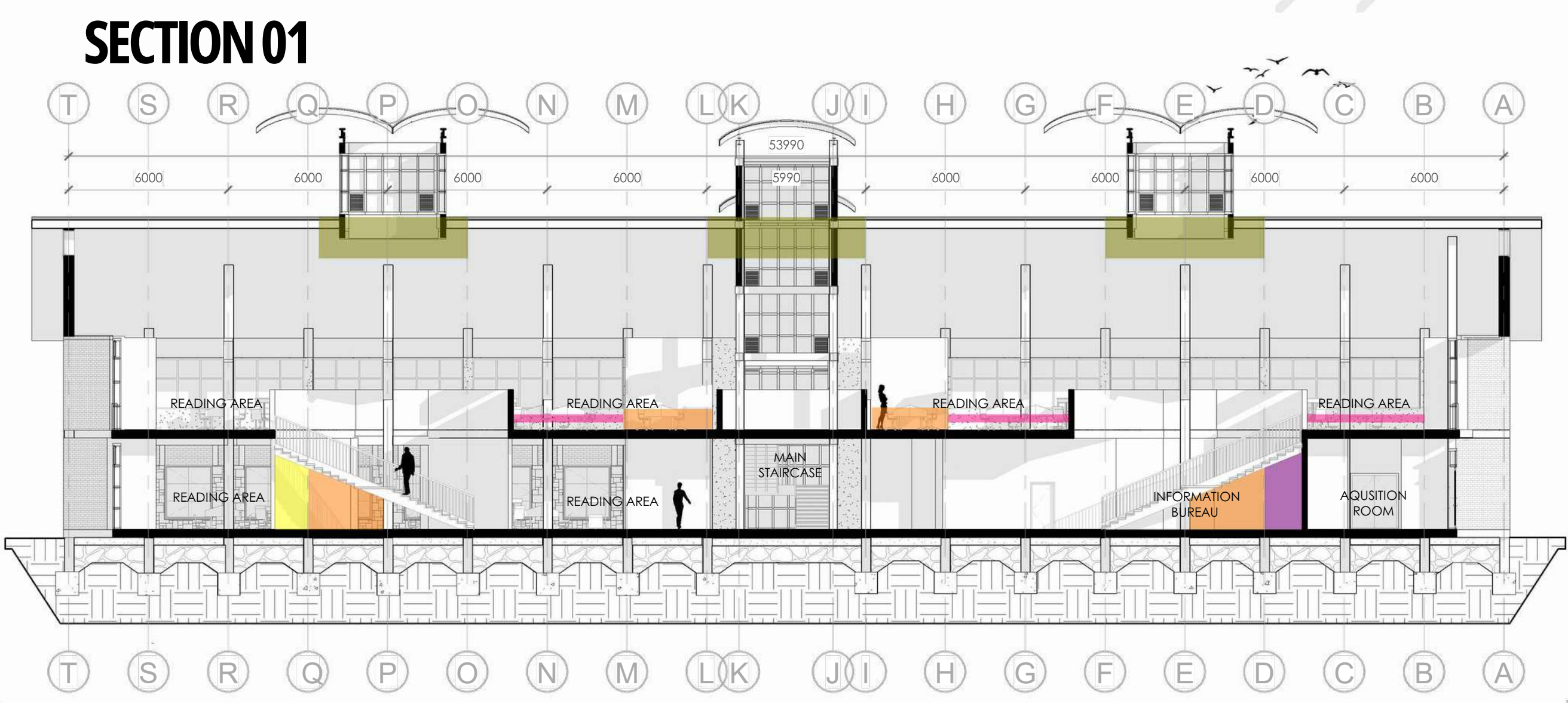


B. PATHOLOGY

ABUILDING PLAN AT HOLOG YFF



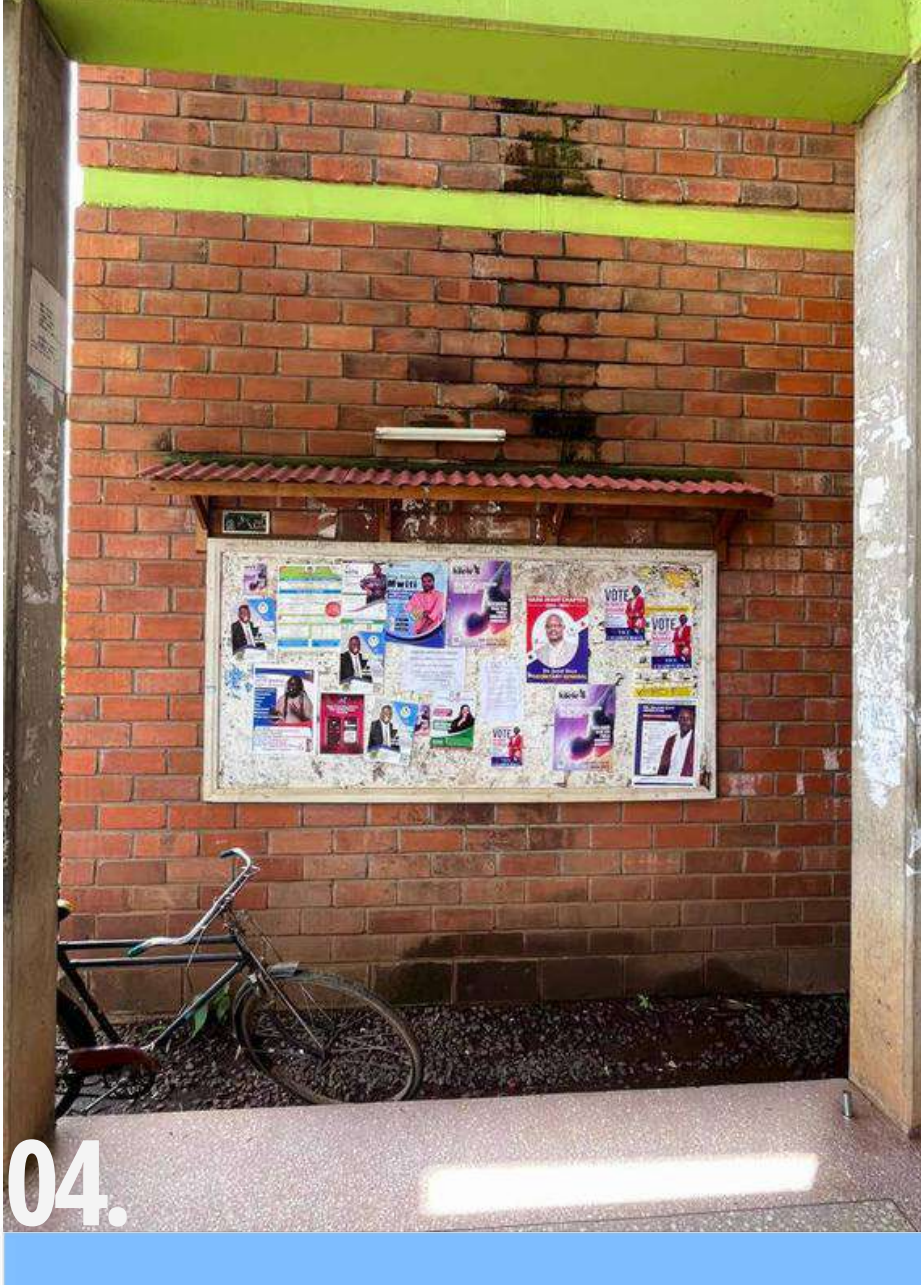
01.



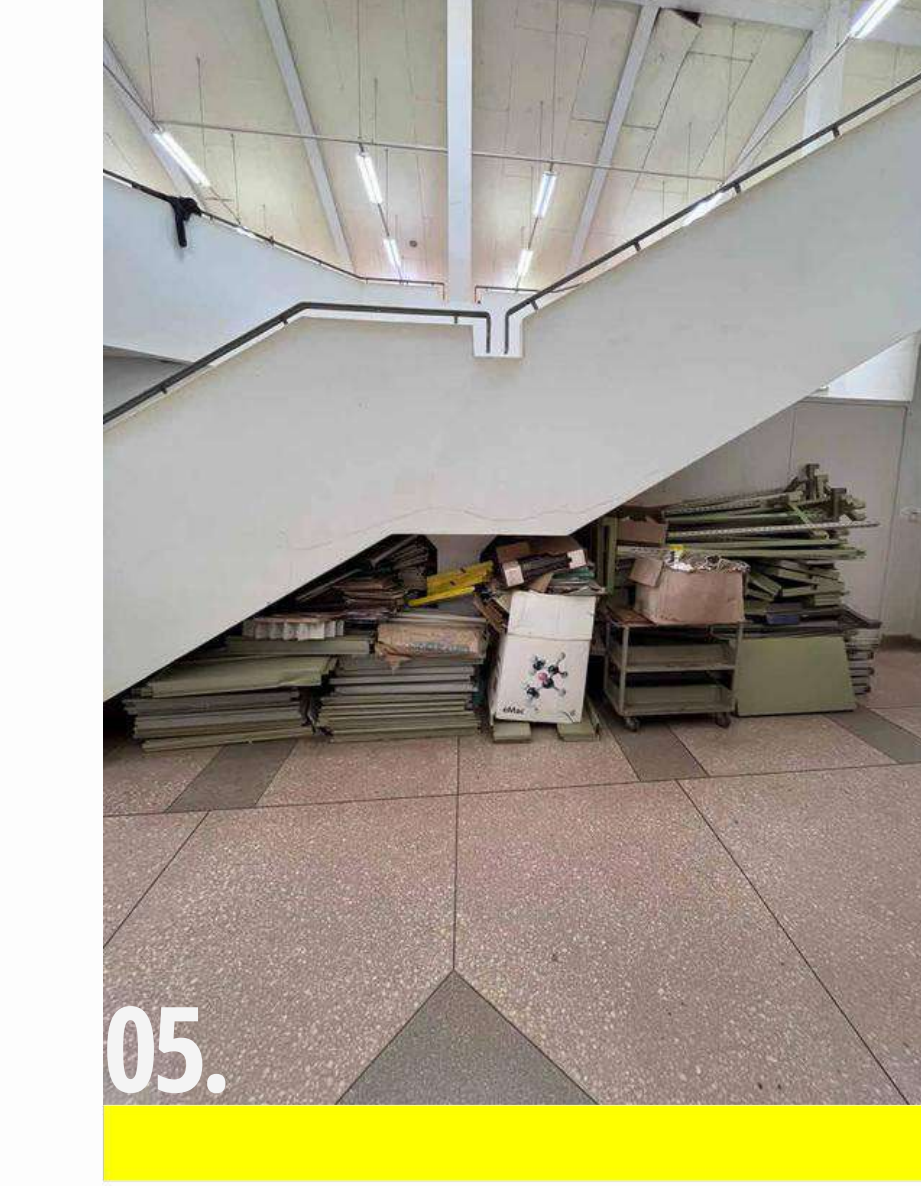
02.



03.



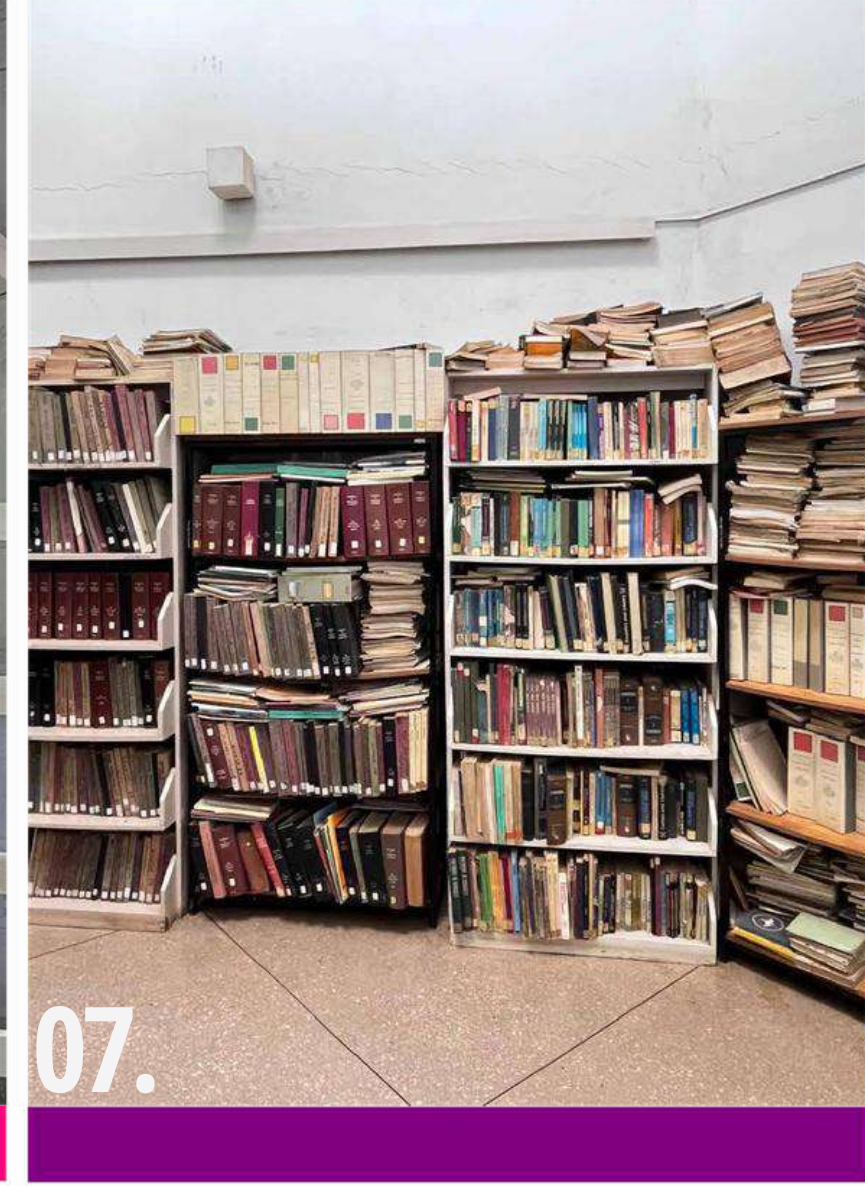
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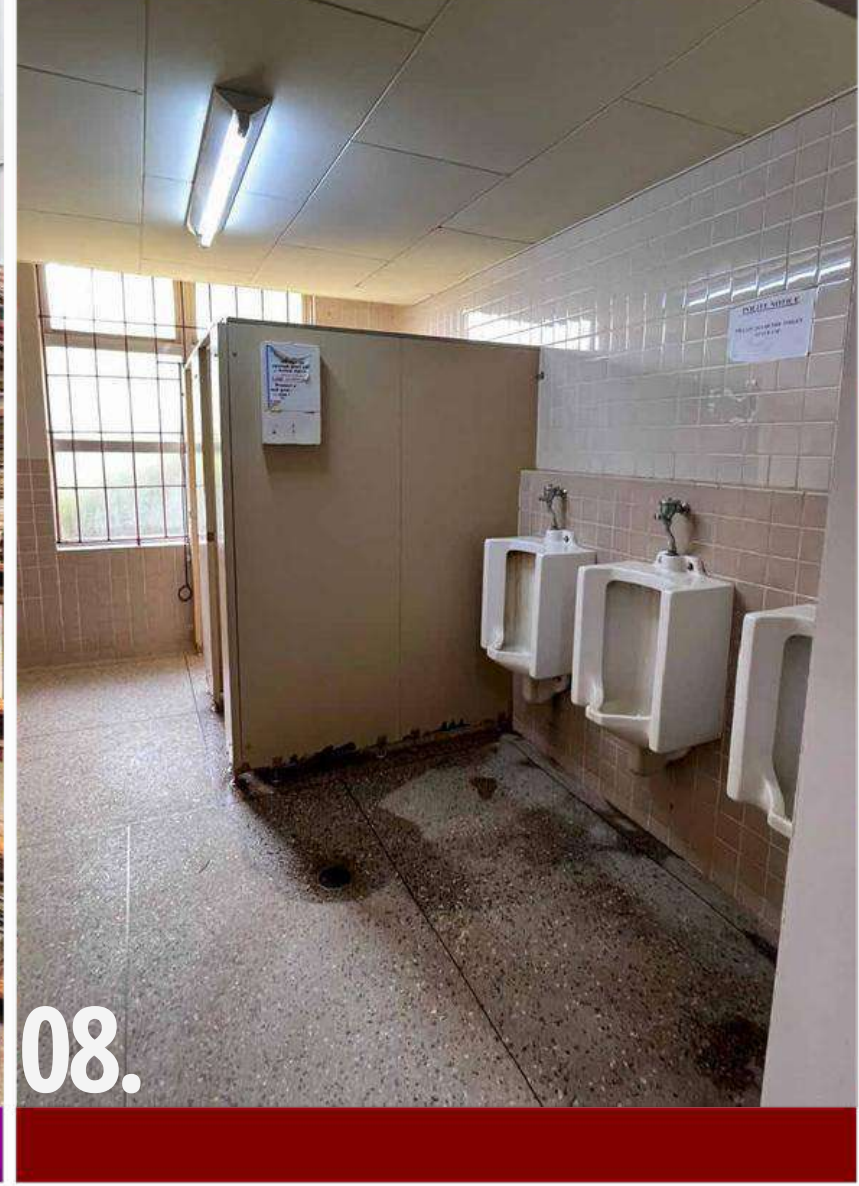
05.



06.



07.



08.

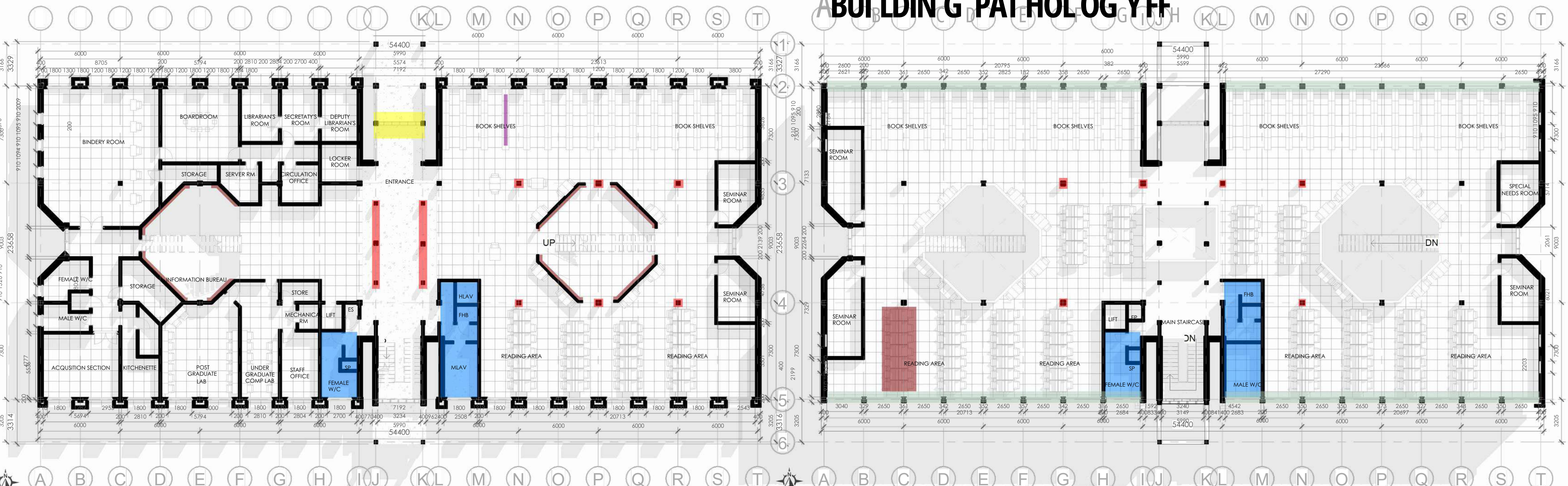


09.

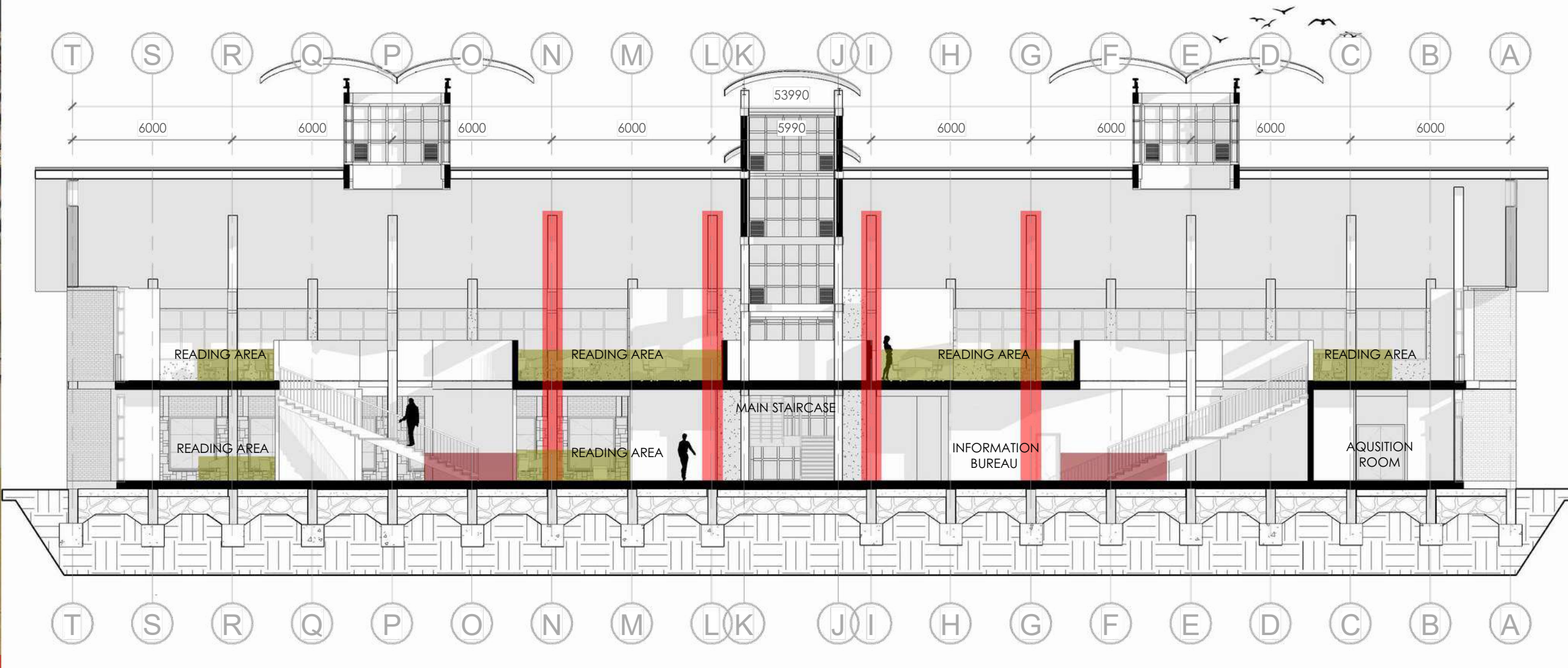
	ROOF DAMAGE & DAMPNSS		ROOT HEAVE AND SUBSTRATE DISPLACEMENT		ACTIVE PENETRATING DAMP & BIOLOGICAL GROWTH.
	IMPROPER EQUIPMENT STORAGE		TRUNKING DAMAGE		SURFACE CORROSION AND MOISTURE SEEPAGE
	SURFACE PATCHING AND FINISH INCONSISTENCY		IMPROPER BOOK STORAGE		RAIN WATER INGRESS & DAMPNSS

B. PATHOLOGY

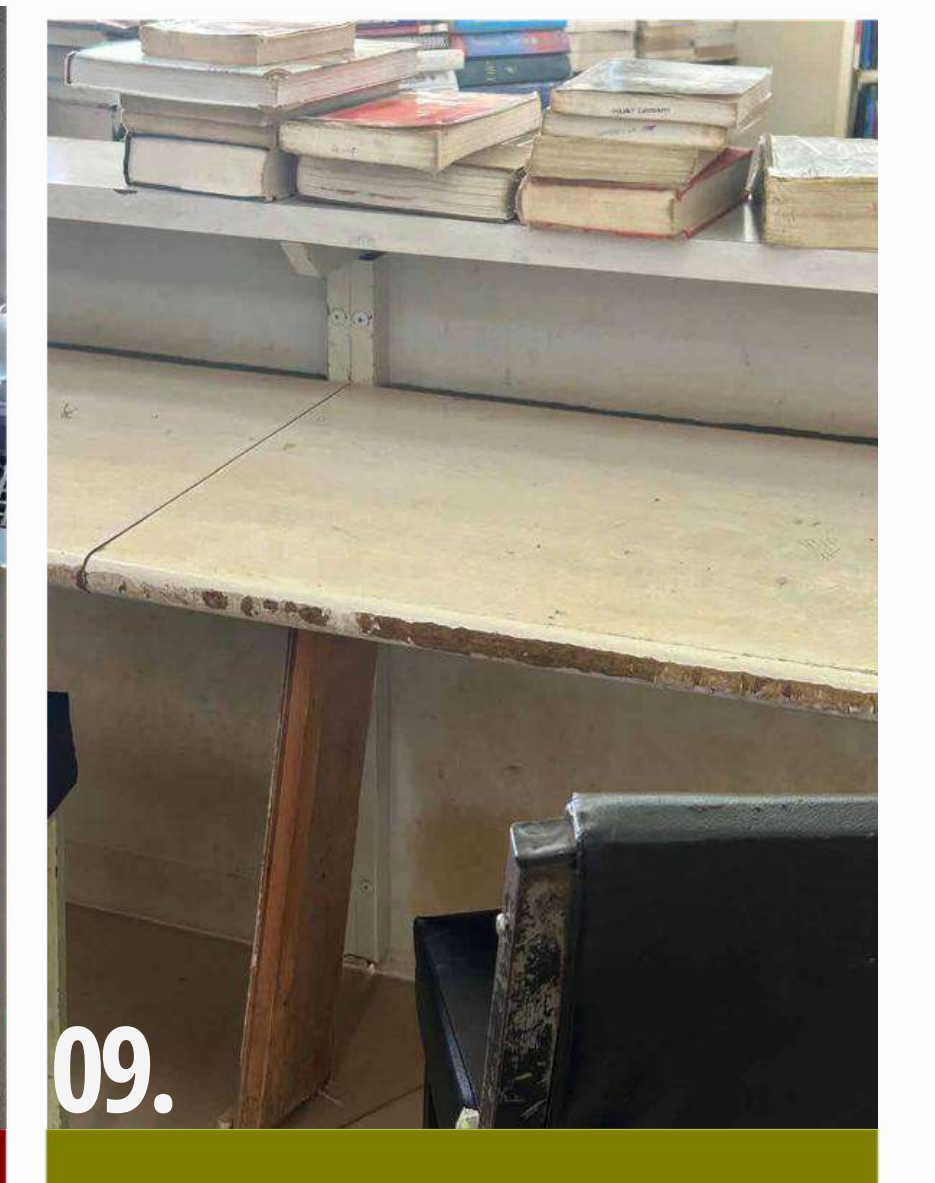
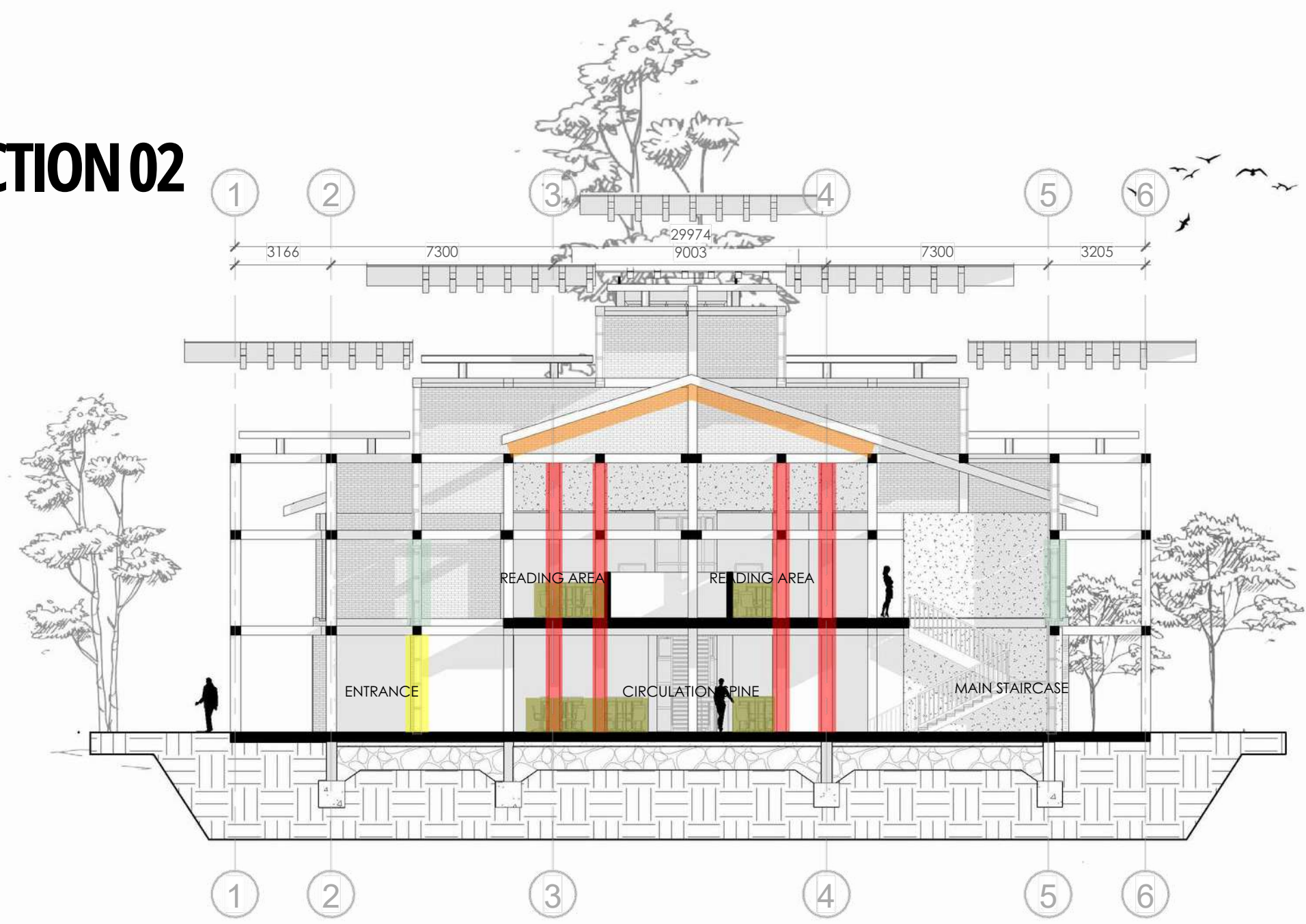
ABUILDING PATHOLOGY



SECTION 01



SECTION 02



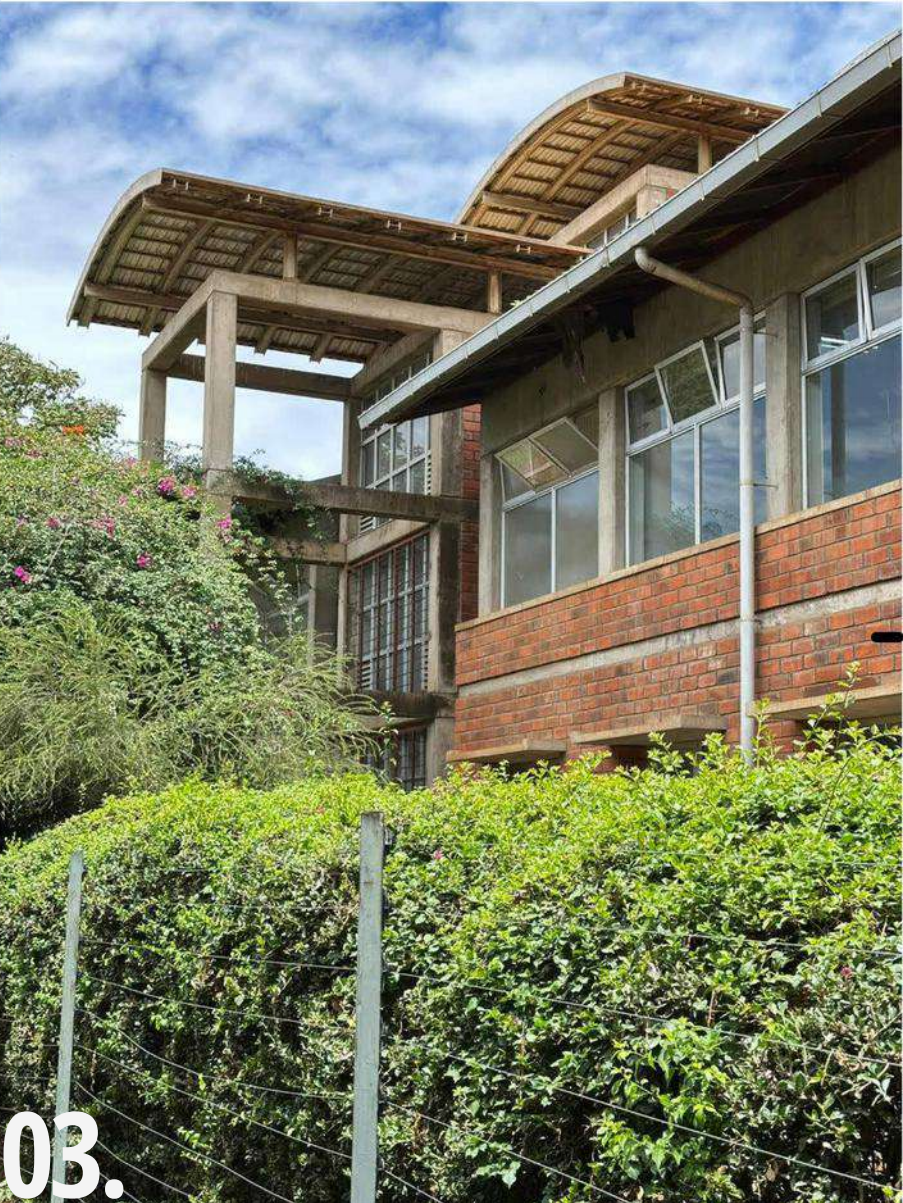
	VERTICAL STRUCTURAL CRACKING & SURFACE IMPACT DAMAGE		PLUMBING FAILURE & NON-FUNCTIONAL FIXTURES		INSTALLATION-INDUCED SPALLING & FRACTURING
	SECURITY COMPROMISE & MATERIAL CORROSION		LIGHTING DAMAGE		CEILING BOARD DAMAGE AND LACK OF MAINTENANCE
	FURNITURE DAMAGE		WINDOW CRACKING & BREAKAGE		SURFACE ABRASION & SCUFFING

CONCRETE ASSESSMENT



01.

THE SURFACES SHOW MODERATE DISCOLORATION AND WEATHERING, PARTICULARLY ALONG BEAM EDGES AND COLUMN FACES, WHICH MAY INDICATE SURFACE CARBONATION, DUST ACCUMULATION, OR MOISTURE STAINING OVER TIME. OVERALL, THE CONCRETE CONDITION APPEARS STABLE BUT AGED, AND A DETAILED ASSESSMENT WOULD LIKELY RECOMMEND FURTHER INVESTIGATION THROUGH CRACK MAPPING, CARBONATION TESTING, AND MOISTURE INSPECTION TO DETERMINE LONG-TERM DURABILITY AND MAINTENANCE REQUIREMENTS.



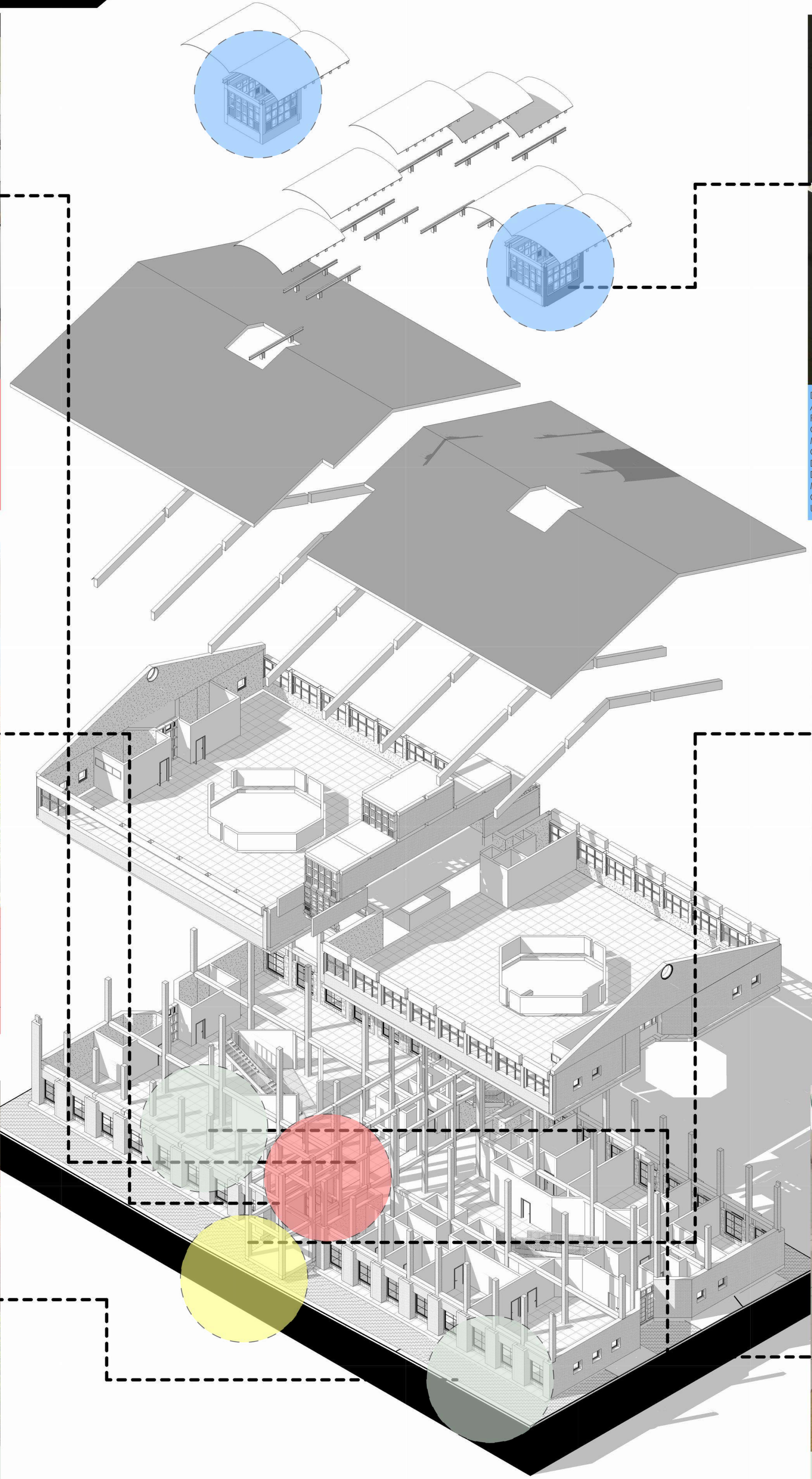
03.

THE REINFORCED CONCRETE FRAME SHOWS SIGNIFICANT ENVIRONMENTAL DISTRESS, CHARACTERIZED BY HEAVY BIOLOGICAL STAINING AND WATER TRACKING THAT INDICATES A FAILURE IN MOISTURE SHEDDING. WHILE THE PRIMARY COLUMNS APPEAR VERTICALLY SOUND, THE HORIZONTAL TIE BEAMS EXHIBIT SURFACE FLAKING AND POTENTIAL DELAMINATION LIKELY CAUSED BY PROLONGED EXPOSURE AND THIN CONCRETE COVER. THESE CONDITIONS, EXACERBATED BY ENCRORCHING VEGETATION, RISK ACCELERATING CARBONATION AND INTERNAL REBAR CORROSION.



05.

THE CONCRETE PAVING SLABS IN THIS VIEW EXHIBIT WIDESPREAD FATIGUE CRACKING AND DIFFERENTIAL SETTLEMENT, PARTICULARLY CONCENTRATED ALONG THE EDGES AND CORNER ZONES. THE PRIMARY DISTRESS IS ALLIGATOR CRACKING AND CORNER BREAKS, LIKELY DRIVEN BY SUBGRADE INSTABILITY FROM POOR DRAINAGE OR SOIL EROSION UNDER THE WALKWAY. THIS STRUCTURAL FAILURE CREATES SIGNIFICANT TRIP HAZARDS AND ALLOWS WATER TO INFILTRATE THE BASE LAYERS, FURTHER ACCELERATING THE GROUND SUBSIDENCE. TO RESTORE THE PATH'S SAFETY AND LONGEVITY, THE DAMAGED SLABS REQUIRE REPLACEMENT, PRECEDED BY SUBGRADE COMPACTION AND THE INSTALLATION OF A PROPER GEOTEXTILE MEMBRANE TO STABILIZE THE UNDERLYING SOIL AGAINST FUTURE MOISTURE-INDUCED SHIFTING.



STRUCTURE - URGENT



STRUCTURE - PARTIALLY URGENT



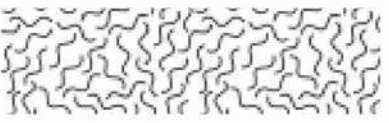
STABLE BUT STILL TO BE RESTORED



STRUCTURE - NEEDS TO BE RESTORED



CARBONATION & SURFACE ABRASION



BIOLOGICAL STAIN



EFFLORESCENCE



COATING DEFECT



02.

DARK STAINING, DISCOLORATION, AND DAMP PATCHES ALONG THE BEAM-SLAB JUNCTIONS INDICATE MOISTURE PENETRATION THROUGH THE ROOF ASSEMBLY, LIKELY CAUSED BY INADEQUATE WATERPROOFING, FAILED ROOF MEMBRANES, OR POOR DRAINAGE ABOVE. THE PRESENCE OF IRREGULAR MARKS AND LOCALIZED SURFACE DEGRADATION SUGGESTS EARLY-STAGE CONCRETE DEGRADATION, WHERE PROLONGED MOISTURE EXPOSURE MAY LEAD TO CARBONATION AND POTENTIAL CORROSION OF EMBEDDED REINFORCEMENT IF LEFT UNTREATED.



04.

THE STRUCTURAL CONCRETE IN THIS IMAGE PRESENTS A COMBINATION OF SUPERFICIAL DEGRADATION AND MECHANICAL WEAR, NOTABLY MORE ADVANCED AT GROUND LEVEL. THE COLUMNS EXHIBIT SIGNIFICANT PITTING AND SURFACE ABRASION, LIKELY DUE TO PHYSICAL IMPACTS AND LOCALIZED MOISTURE WICKING FROM THE TILE-TO-CONCRETE INTERFACE. WHILE THE UPPER LIME-PAINTED BEAMS APPEAR STRUCTURALLY INTACT, THE UNPAINTED VERTICAL MEMBERS SHOW PATCHY EFFLORESCENCE AND EARLY-STAGE CARBONATION, WHICH COULD COMPROMISE THE INTERNAL REINFORCEMENT IF LEFT UNTREATED.



06.

THIS INTERIOR COLUMN EXHIBITS LOCALIZED MECHANICAL SPALLING AND SIGNIFICANT SURFACE POROSITY, LIKELY RESULTING FROM POOR VIBRATION DURING THE INITIAL POUR AND SUBSEQUENT PHYSICAL IMPACTS. THE PRESENCE OF HONEYCOMBING (VOIDS IN THE CONCRETE) AND EXPOSED AGGREGATE AT THE CORNER SUGGESTS A LACK OF DENSE COMPACTION, WHICH WEAKENS THE PROTECTIVE CONCRETE COVER. ADDITIONALLY, THE BASE SHOWS MOISTURE WICKING AND STAINING, POTENTIALLY CAUSED BY CAPILLARY ACTION FROM FLOOR CLEANING OR RISING DAMP, WHICH CAN LEAD TO THE "SWELLING" OF INTERNAL REINFORCEMENT OVER TIME. TO REMEDIATE THIS, THE DAMAGED AREAS REQUIRE PATCHING WITH HIGH-STRENGTH NON-SHRINK GROUT, FOLLOWED BY THE INSTALLATION OF STAINLESS STEEL OR PVC CORNER GUARDS TO PROTECT AGAINST FUTURE MECHANICAL IMPACT.

CARBONATION & SURFACE ABRASION	EFFLORESCENCE	BIOLOGICAL STAINING & ROOT INGRESS	STRUCTURAL COVER SURVEY	MOISTURE SHEDDING	PROTECTIVE COATINGS
MITIGATION: ALKALINITY RECOVERY: FOR DEEP CARBONATION, APPLY A SODIUM SILICATE-BASED RE-ALKALIZATION TREATMENT TO RESTORE THE CONCRETE'S HIGH PH. ANTI-CARBONATION COATING: APPLY A SPECIALIZED ACRYLIC OR POLYMER-MODIFIED COATING. THESE ACT AS A "LUNG," LETTING MOISTURE VAPOR OUT BUT BLOCKING CO ₂ MOLECULES FROM ENTERING.	MITIGATION: ACID NEUTRALIZATION: CLEAN THE SURFACE WITH A MILD PHOSPHORIC ACID SOLUTION TO DISSOLVE THE SALTS WITHOUT DAMAGING THE CONCRETE MATRIX. CAPILLARY BREAK: APPLY A PENETRATING SILANE/SILOXANE SEALER. UNLIKE PAINT, THIS SOAKS INTO THE PORES TO CREATE A HYDROPHOBIC (WATER-REPELLENT) ZONE, STOPPING THE "WICKING" ACTION THAT BRINGS SALTS TO THE SURFACE.	MITIGATION: BIOCIDAL WASH: TREAT THE SURFACE WITH A SODIUM HYPOCHLORITE OR QUATERNARY AMMONIUM SOLUTION TO KILL SPORES DEEP WITHIN THE PORES. PHYSICAL BARRIER: TRIM ALL VEGETATION TO MAINTAIN A MINIMUM 500MM AIR GAP BETWEEN THE CONCRETE AND ANY GREENERY TO ENSURE RAPID SURFACE DRYING.	CONDUCT A NON-DESTRUCTIVE COVER METER SURVEY ON THE WEATHERED EXTERIOR BEAMS AND PITTED COLUMNS TO ENSURE REINFORCEMENT HAS NOT REACHED THE CRITICAL CARBONATION DEPTH.	RETROFIT EXTERIOR BEAMS WITH "DRIP GROOVES" OR WEATHER-STRIPPING TO PREVENT WATER FROM TRACKING DOWN THE VERTICAL FACES, WHICH IS CURRENTLY FUELING BIOLOGICAL GROWTH.	APPLY A HIGH-BUILD, ANTI-CARBONATION COATING TO ALL EXPOSED EXTERIOR CONCRETE. FOR UNPAINTED COLUMNS, USE A LANE-BASED WATER REPELLENT TO STOP MOISTURE INGRESS WITHOUT ALTERING THE AESTHETIC.

CRACK MAPPING

GFAB



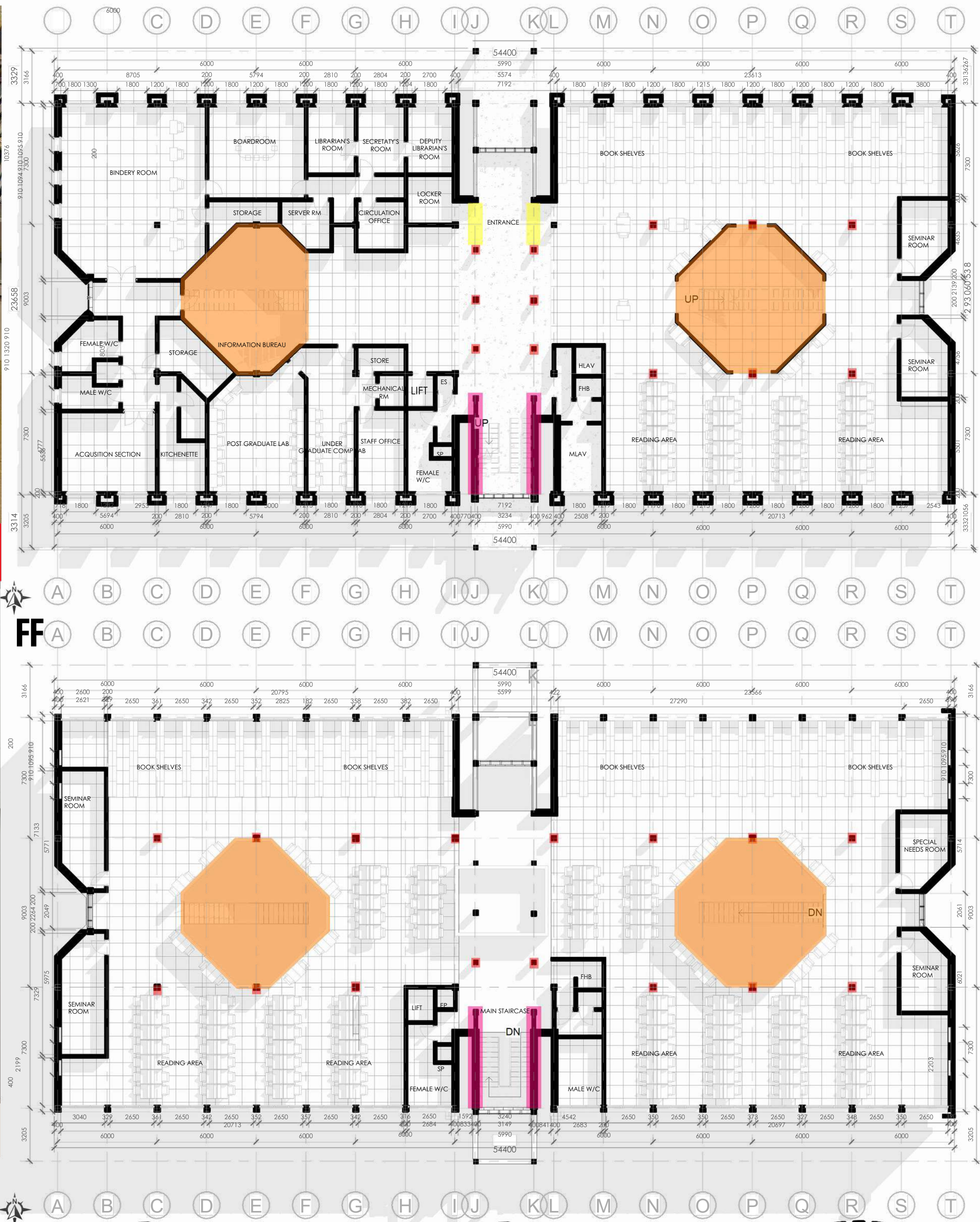
01.

SURFACE IMPACT CRACK



03.

HORIZONTAL STRUCTURAL CRACK
(SHEAR OR SETTLEMENT CRACK).



02.

COMBINED SHEAR & TENSION CRACKING



04.

SEPARATION AT STRUCTURAL INTERFACE
(JOINT FAILURE)

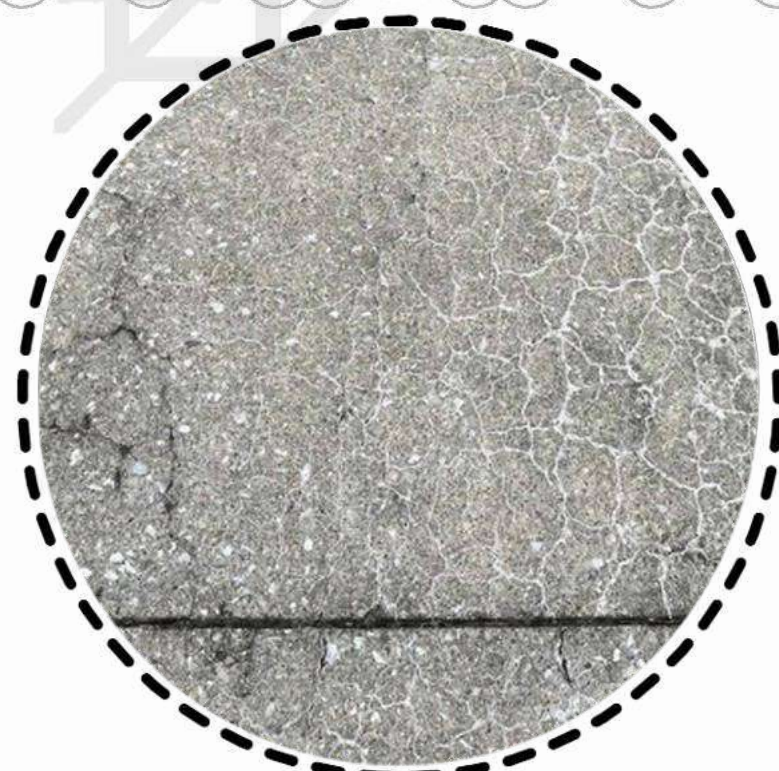
TYPES OF CRACKS



RE-ENTRANT CORNER CRACK



CRUSTING CRACKS CONCRETE



CRAZING CRACKS CONCRETE-SIDEWALK



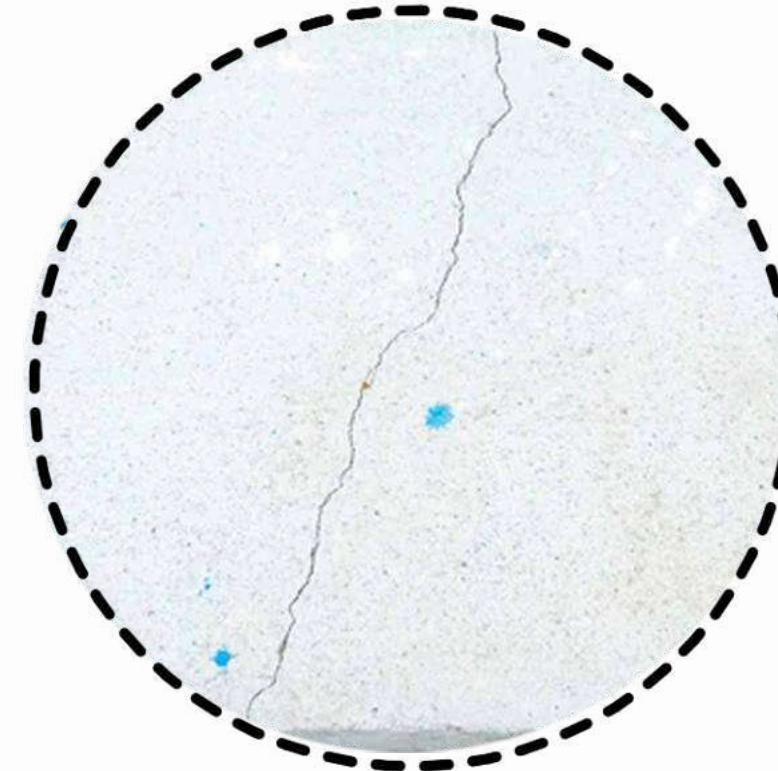
STRUCTURAL CRACK



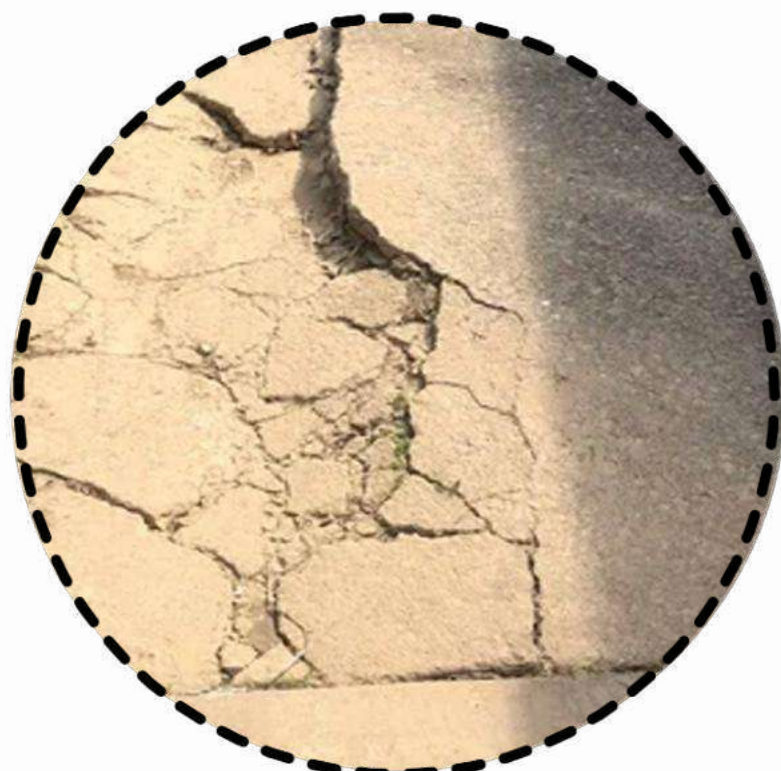
BRICK STAIRSTEP CRACK



HEAVING CONCRETE CRACK



CONCRETE HAIRLINE CRACK



CRUSHED CONCRETE



SHRINKAGE CRACKS

REPAIR STRATEGY

SURFACE IMPACT CRACK

CAUSE: MECHANICAL DAMAGE FROM HIGH-TRAFFIC, EQUIPMENT, OR FURNITURE STRIKES.

STRATEGY: PREPARATION: RAKE OUT LOOSE DEBRIS AND CLEAN THE SURFACE OF THE CRACKED AREA.

FILLING: APPLY A HIGH-STRENGTH, SHRINK-RESISTANT CEMENTITIOUS FILLER OR EPOXY RESIN FOR DEEPER GOUGES.

PROTECTION: ONCE CURED, SAND SMOOTH AND APPLY A DURABLE, IMPACT-RESISTANT PAINT FINISH.

PREVENTION: INSTALL DADO RAILS, CORNER GUARDS, OR BUFFER STRIPS TO PROTECT THE WALL FROM FUTURE IMPACTS.

COMBINED SHEAR & TENSION CRACKING

CAUSE: STRUCTURAL MOVEMENT WHERE THE WALL IS BEING PULLED AND PUSHED SIMULTANEOUSLY.

STRATEGY: STABILIZATION: IF MOVEMENT IS ACTIVE, INSTALL HELICAL STAINLESS STEEL BARS (CRACK STITCHING) ACROSS THE CRACK AT 300MM INTERVALS TO 'E' THE MASONRY BACK TOGETHER

INJECTION: GROUT THE INTERNAL VOID WITH A LOW-VISCOSITY STRUCTURAL EPOXY OR LIME-BASED GROUT TO RESTORE INTEGRITY.

FINISH: USE A FLEXIBLE "OVER-STITCH" PLASTERING TECHNIQUE TO ALLOW FOR MINOR FUTURE MICRO-MOVEMENTS WITHOUT SHOWING THE CRACK AGAIN.

HORIZONTAL STRUCTURAL CRACK (SHEAR OR SETTLEMENT CRACK).

CAUSE: DIFFERENTIAL SETTLEMENT OR FAILURE AT THE FLOOR/CEILING SLAB JOINT.

STRATEGY: INVESTIGATION: VERIFY IF THE SETTLEMENT HAS STABILIZED BEFORE SEALING.

REINFORCEMENT: RAKE OUT THE HORIZONTAL MORTAR JOINT AND INSTALL BED-THE JOINT REINFORCEMENT (LADDER WIRE) TO DISTRIBUTE THE LOAD.

JOINTING: IF THE CRACK IS AT A SLAB/BED JUNCTION, CONVERT THE CRACK INTO A FORMAL MOVEMENT JOINT BY RAKING IT OUT AND FILLING IT WITH A COMPRESSIBLE BACKER ROD AND FLEXIBLE SEALANT RATHER THAN RIGID MORTAR.

SEPARATION AT STRUCTURAL INTERFACE (JOINT FAILURE)

CAUSE: FAILURE OF THE BOND BETWEEN THE RC FRAME (COLUMNS/BEAMS) AND MASONRY INFILL.

STRATEGY: CLEANING: MECHANICALLY REMOVE ALL OLD, FAILED MORTAR AND DEBRIS FROM THE VERTICAL GAP.

TYING: INSTALL LATERAL WALL TIES OR "DOVETAIL" ANCHORS IF THE WALL IS LOOSE.

SEALING: INSERT A CLOSED-CELL POLYETHYLENE BACKER ROD TO THE CORRECT DEPTH.

FLEXIBLE SEAL: APPLY A HIGH-MODULUS POLYSULFIDE OR SILICONE SEALANT THAT ALLOWS FOR EXPANSION AND CONTRACTION BETWEEN THE TWO DIFFERENT MATERIALS (CONCRETE AND BRICK).

ABS211-0413/2022

OBUYA ACHIENG

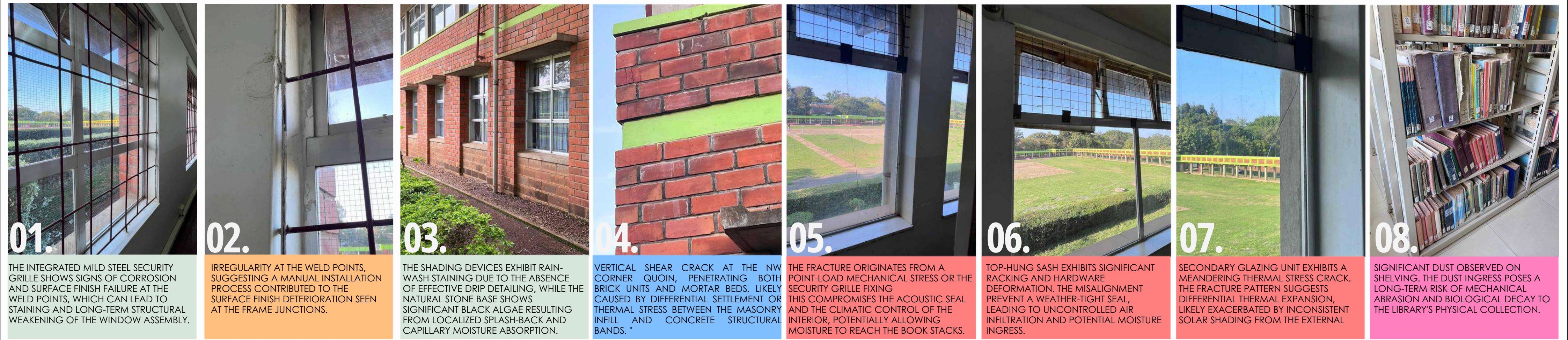
CONSERVATION - JKUAT LIBRARY

ENVELOPE ANALYSIS

E01

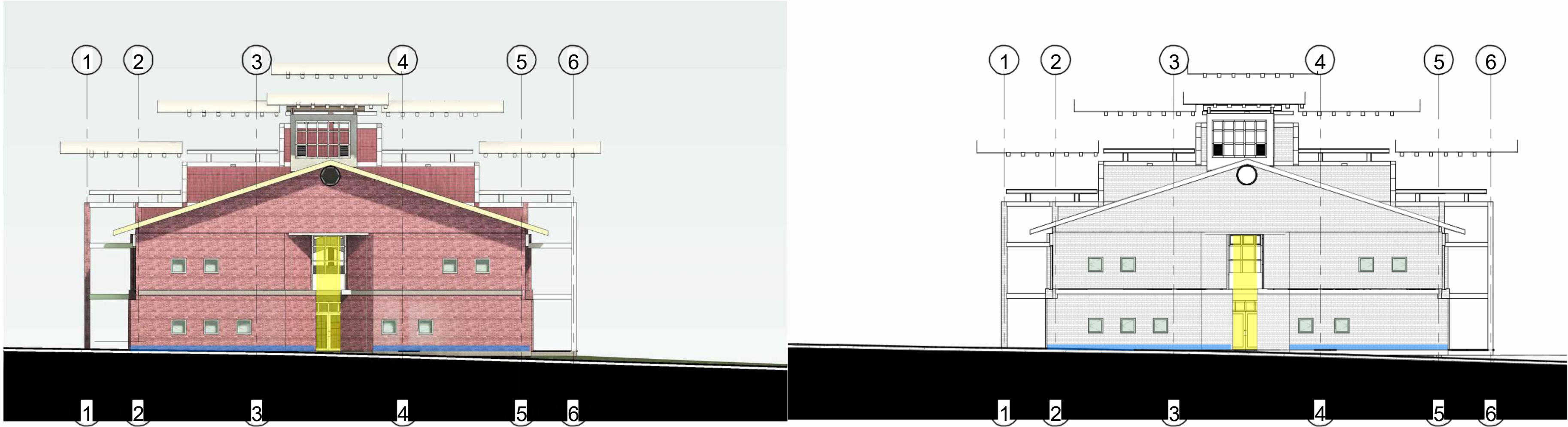


SITE IMAGES



BRICK		GLASS		CONCRETE		STONE	
CLASSIFICATION: HAND-MOULDED OR MACHINE-PRESSED CLAY BRICK. COLOR/TEXTURE: DEEP TERRACOTTA/OCHRE WITH HIGH SURFACE POROSITY. DIMENSIONS: STANDARD KENYAN MODULAR SIZE (APPROX. 225MM X 112.5MM X 75MM). OBSERVATIONS: CRACKING NEAR THE TOP & BASE OF THE LIBRARY WALLS.		TYPE: 6MM CLEAR FLOAT GLASS INSTALLATION: FIXED WITHIN METAL FRAMING WITH RUBBER GASKETS/SEALANTS. OBSERVATIONS: MECHANICAL GRID OVERLAY (BURGLAR PROOFING) ANY OXIDATION (RUST) AT THE WELD POINTS OF THE GRID, WHICH CAN LEAD TO "RUST JACKING" AND EVENTUALLY CRACK THE GLASS OR DAMAGE THE FRAME. RESEALING & FIXING BROKEN WINDOW		CLASSIFICATION: FAIR-FACED REINFORCED CONCRETE (FRC). FINISH: SMOOTH-PLANED OBSERVATIONS: CARBONATION & BIOLOGICAL GROWTH IN SOME PARTS OF THE FACADE		TYPE: LIKELY YELLOWISH TUFF SHAPE: ASHLAR (SQUARED) OR ROUGH-HEWN. OBSERVATIONS: BIOLOGICAL GROWTH (BLACK OR GREEN ALGAE/LICHEN) WHICH OFTEN OCCURS ON THE SOUTHERN, SHADED FACADES OF THE LIBRARY WHERE MOISTURE LINGERS.	

E02.



SITE IMAGES



BRICK		GLASS		CONCRETE		STONE	
CLASSIFICATION: HAND-MOULDED OR MACHINE-PRESSED CLAY BRICK. COLOR/TEXTURE: DEEP TERRACOTTA/OCHRE WITH HIGH SURFACE POROSITY WITH SURFACE DISCOLOURATION. DIMENSIONS: STANDARD KENYAN MODULAR SIZE (APPROX. 225MM X 112.5MM X 75MM). OBSERVATIONS: UPPER ZONES HEAVY ATMOSPHERIC SOILING LOWER ZONES SHOW LOCALIZED EFFLORESCENCE AND BIOLOGICAL COLONIZATION.		TYPE: 6MM CLEAR FLOAT GLASS INSTALLATION: FIXED WITHIN METAL FRAMING WITH RUBBER GASKETS/SEALANTS. OBSERVATIONS: WINDOWS ARE IN GOOD CONDITION BUT WHERE THE GLARE TRAVELS, THE HEAT FOLLOWS. THIS "UNCONTROLLED" LIGHT CONTRIBUTES TO A GREENHOUSE EFFECT INSIDE THE LIBRARY, FORCING THE HVAC SYSTEM (OR THE OPEN WINDOWS) TO WORK HARDER.		CLASSIFICATION: FAIR-FACED REINFORCED CONCRETE (FRC). FINISH: SMOOTH-PLANED OBSERVATIONS: CARBONATION & BIOLOGICAL GROWTH IN SOME PARTS OF THE FACADE		TYPE: LIKELY YELLOWISH TUFF SHAPE: ASHLAR (SQUARED) OR ROUGH-HEWN. OBSERVATIONS: BIOLOGICAL GROWTH (BLACK OR GREEN ALGAE/LICHEN) WHICH OFTEN OCCURS ON SHADED FACADES WHERE MOISTURE LINGERS.	

ENVELOPE ANALYSIS

E03.



SITE IMAGES

01.

THE NATURAL STONE BASE SHOWS SIGNIFICANT BLACK ALGAE RESULTING FROM LOCALIZED SPLASH-BACK AND CAPILLARY MOISTURE ABSORPTION.

02.

THE SHADING DEVICES EXHIBIT RAIN-WASH STAINING DUE TO THE ABSENCE OF EFFECTIVE DRIP DETAILING

03.

EXHIBITS ADVANCED STRUCTURAL DECAY, SPECIFICALLY SPALLING OF THE CONCRETE FASCIA DUE TO PROLONGED WATER INGRESS AND REINFORCEMENT CORROSION. DEFECTIVE DRAINAGE DOWNPIPES FURTHER COMPROMISE THE BUILDING'S CLIMATIC SEAL

04.

EXTERNAL SPECULAR REFLECTIONS FROM ADJACENT BUILDINGS BYPASS ARCHITECTURAL SHADING, CAUSING INTENSE VISUAL DISABILITY AND INCREASED THERMAL LOADS THAT COMPROMISE THE FUNCTIONALITY OF THE PRIMARY READING ZONES.

05.

THERMAL STRESS FRACTURE INDUCED BY EXTREME TEMPERATURE GRADIENTS ACROSS THE PANE. THE FAILURE IS LIKELY EXACERBATED BY INCONSISTENT SOLAR SHADING FROM THE EXTERNAL CONCRETE SOLAR-SHADES (BROWS).

06.

TOP-HUNG SASH EXHIBITS SIGNIFICANT RACKING AND HARDWARE DEFORMATION. THIS PREVENT A WEATHER-TIGHT SEAL, LEADING TO UNCONTROLLED AIR INFILTRATION AND POTENTIAL MOISTURE INGRESS.

07.

STAR-PATTERN IMPACT FRACTURES INDICATE PHYSICAL DAMAGE, COMPROMISING THE LIBRARY'S ACOUSTIC AND CLIMATIC ENVELOPE WHILE CREATING ENTRY POINTS FOR PESTS THAT THREATEN ARCHIVAL BOOK COLLECTIONS.

08.

VERTICAL LINEAR FRACTURE. STRUCTURAL STRESS FRACTURE RESULTING FROM MECHANICAL BINDING WITHIN THE WINDOW FRAME.

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E04.



SITE IMAGES

01.

LANDSCAPING IS AT CIRCULATION FOYERS, MITIGATING DIRECT BIOLOGICAL RISKS TO ARCHIVAL COLLECTIONS.DROOPING FOLIAGE SUGGESTS POOR INDOOR AIR QUALITY OR INADEQUATE LIGHT FILTRATION THROUGH THE WEATHERED GLAZING

02.

ADVANCED SOLAR FILM PHOTODEGRADATION AND ADHESIVE DELAMINATION INDICATE TOTAL FAILURE OF INTERNAL GLARE-CONTROL MEASURES, RESULTING FROM PROLONGED UV EXPOSURE AND EXCESSIVE THERMAL STRESS ON THE GLAZING.

03.

THE FACADE EXHIBITS A HIGH DEGREE OF POROSITY-DRIVEN DEGRADATION. DIFFERENTIAL WEATHERING LOWER ZONES SHOW ADVANCED BIOLOGICAL COLONIZATION (DARKENING), WHILE UPPER REVEALS EXHIBIT HEAVY SALT EFFLORESCENCE.

BRICK	GLASS	CONCRETE	STONE
CLASSIFICATION: HAND-MOULDED OR MACHINE-PRESSED CLAY BRICK. COLOR/TEXTURE: DEEP TERRACOTTA/OCBRE WITH HIGH SURFACE POROSITY. DIMENSIONS: STANDARD KENYAN MODULAR SIZE (APPROX. 225MM X 112.5MM X 75MM). OBSERVATIONS:THE FACADE EXHIBITS POROSITY DEGRADATION. & ADVANCED BIOLOGICAL COLONIZATION (DARKENING)	TYPE: 6MM CLEAR FLOAT GLASS INSTALLATION: FIXED WITHIN METAL FRAMING WITH RUBBER GASKETS/SEALANTS. OBSERVATIONS: MECHANICAL GRID OVERLAY (BURGLAR PROOFING) ANY OXIDATION (RUST) AT THE WELD POINTS OF THE GRID, WHICH CAN LEAD TO "RUST JACKING" AND EVENTUALLY CRACK THE GLASS OR DAMAGE THE FRAME.RESEALLING & FIXING BROKEN WINDOW	CLASSIFICATION: FAIR-FACED REINFORCED CONCRETE (FRC). FINISH: SMOOTH-PLANED OBSERVATIONS: CARBONATION & BIOLOGICAL GROWTH IN SOME PARTS OF THE FACADE	TYPE: LIKELY YELLOWISH TUFF SHAPE: ASHLAR (SQUARED) OR ROUGH-HEWN. OBSERVATIONS: BIOLOGICAL GROWTH (BLACK OR GREEN ALGAE/LICHEN) WHICH OFTEN OCCURS ON THE SOUTHERN, SHADED FACADES OF THE LIBRARY WHERE MOISTURE LINGERS.

MASSING ANALYSIS

01.

1. The Genesis of Form (Massing Analysis)

The design process began with a primary rectangular volume, chosen for its programmatic efficiency. However, to optimize the building's relationship with its context, a strategic fracture was introduced. By bisecting the primary mass, we achieved two critical objectives:

- Increased Surface Area: Expanding the building envelope to maximize opportunities for natural ventilation and daylighting.
- Porosity: Creating a central "breathe-through" zone that breaks the monolithic scale and invites the surrounding environment into the heart of the structure.

02.

2. Performance-Driven Validation

The evolution of the mass was not arbitrary; it was refined through four key environmental lenses:

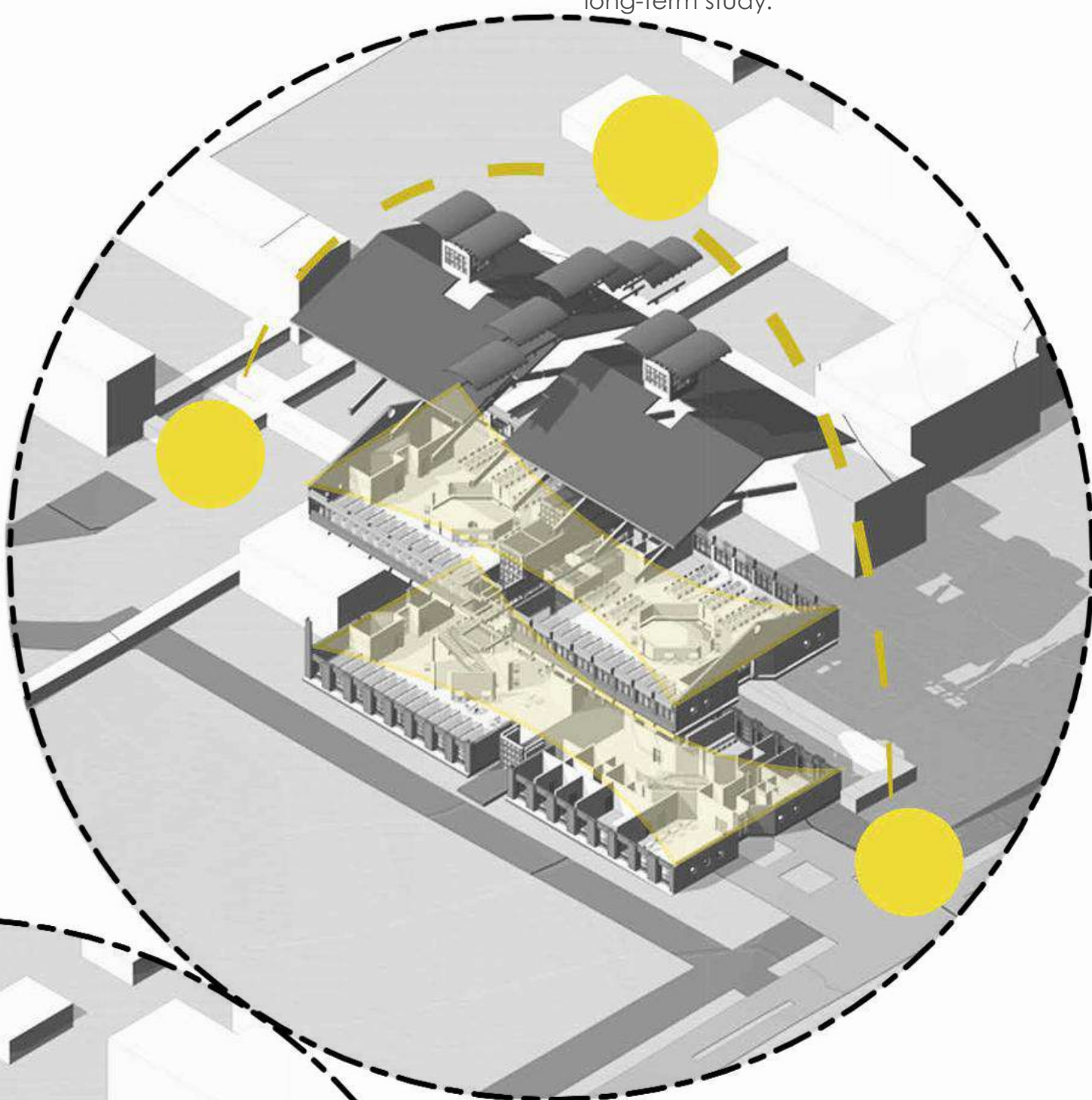
- **Sunlight & Thermal Mapping:** By spilling the mass, we reduced the deep floor plates that often suffer from dark interiors and heat stagnation. The resulting forms allow for controlled solar gain while ensuring that heat is dissipated through improved airflow.
- **Wind Performance:** The orientation and separation of the blocks act as a funnel, capturing prevailing breezes to facilitate passive cooling across the site.
- **Lighting:** The narrow footprints ensure that "high-quality" natural light penetrates the core of the library spaces, reducing the reliance on artificial lighting and enhancing the user experience for long-term study.

03.

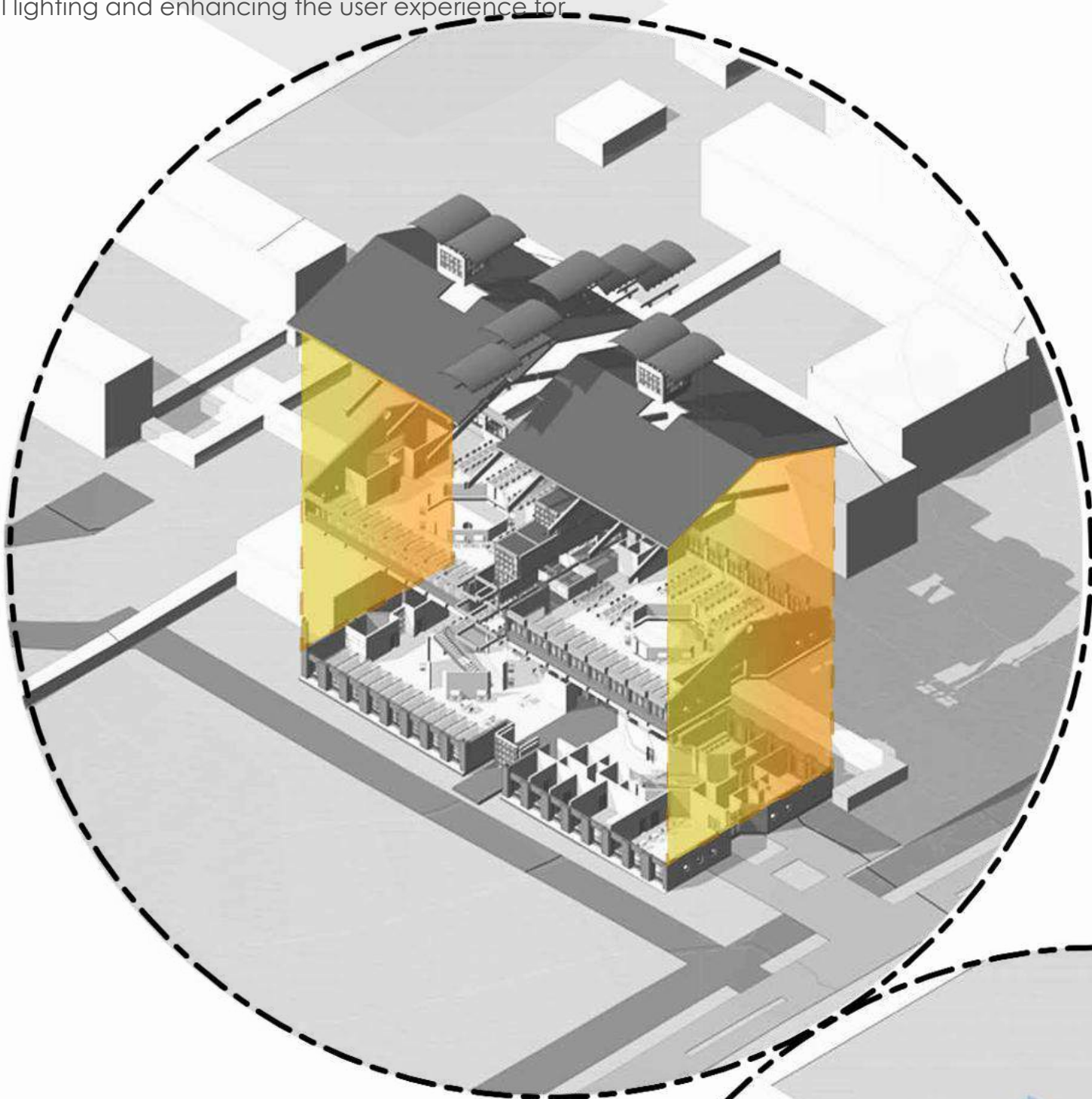
Volumetric Fracture: The technical term for splitting the block.

3.Site Integration & Conservation (JKUAT Library Context)

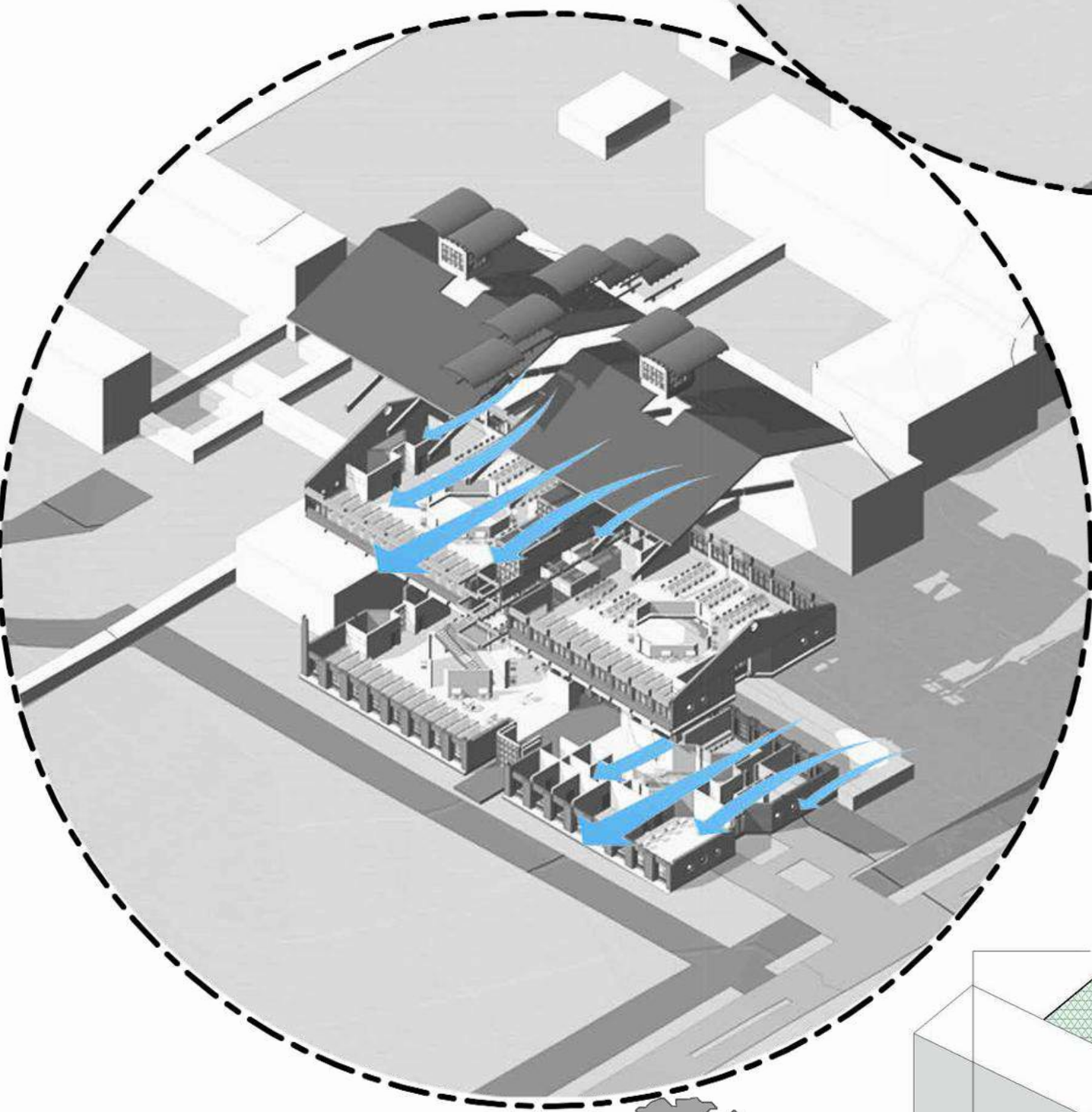
The final isometric view demonstrates the building's dialogue with the existing JKUAT Library campus. The proposed intervention respects the established grain of the site while introducing a contemporary, high-performance typology. CS



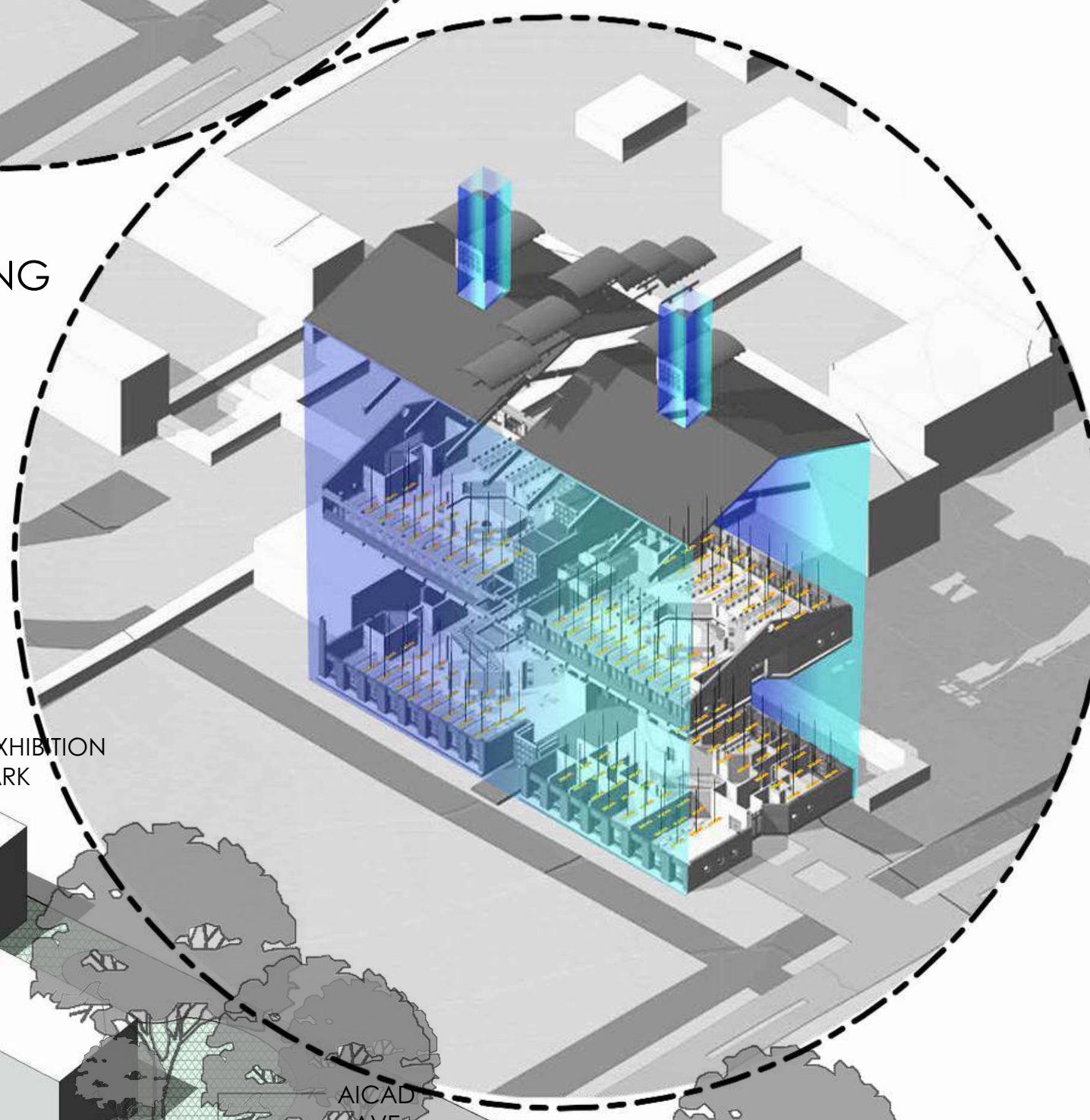
SUNLIGHT



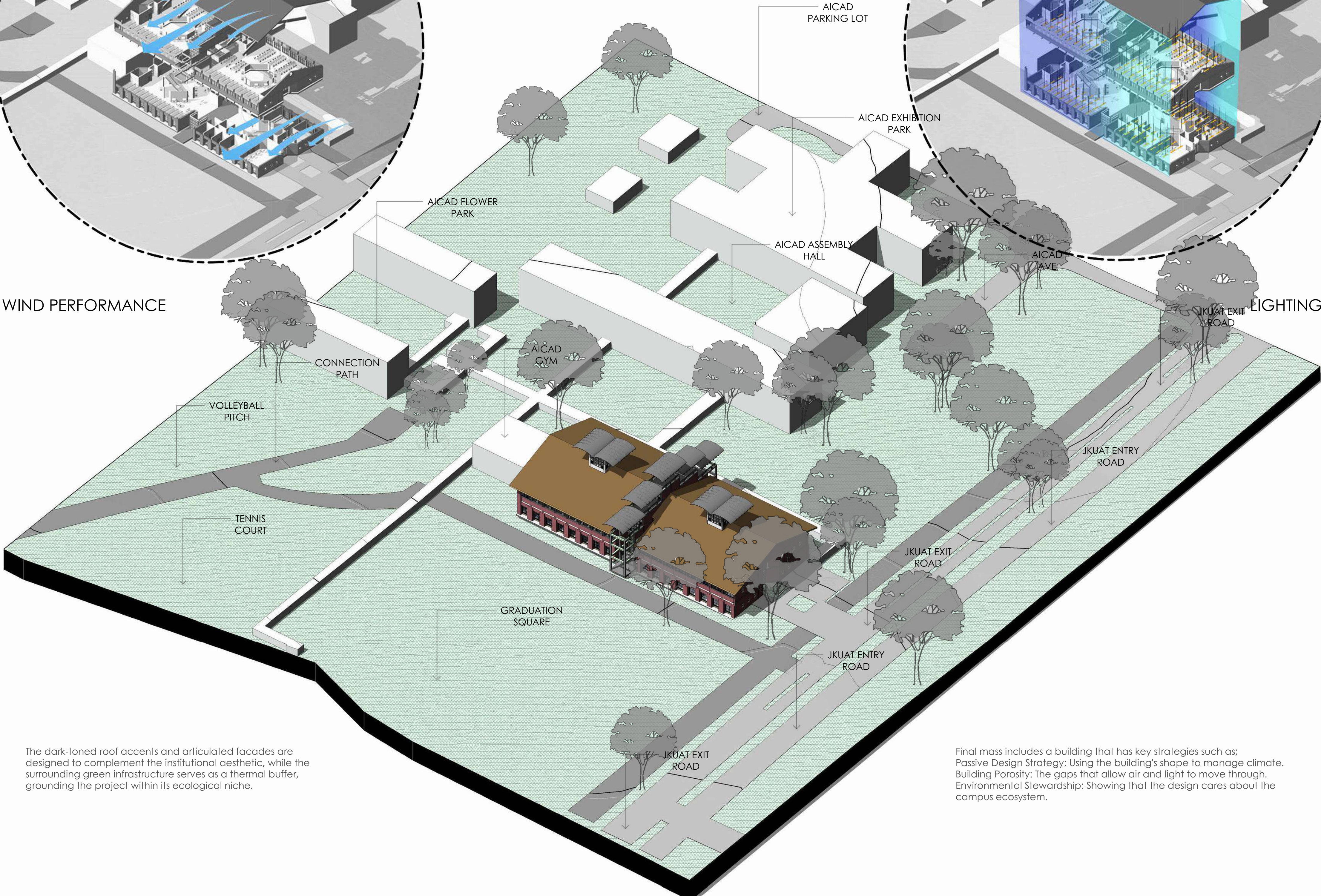
THERMAL MAPPING



WIND PERFORMANCE



LIGHTING



The dark-toned roof accents and articulated facades are designed to complement the institutional aesthetic, while the surrounding green infrastructure serves as a thermal buffer, grounding the project within its ecological niche.

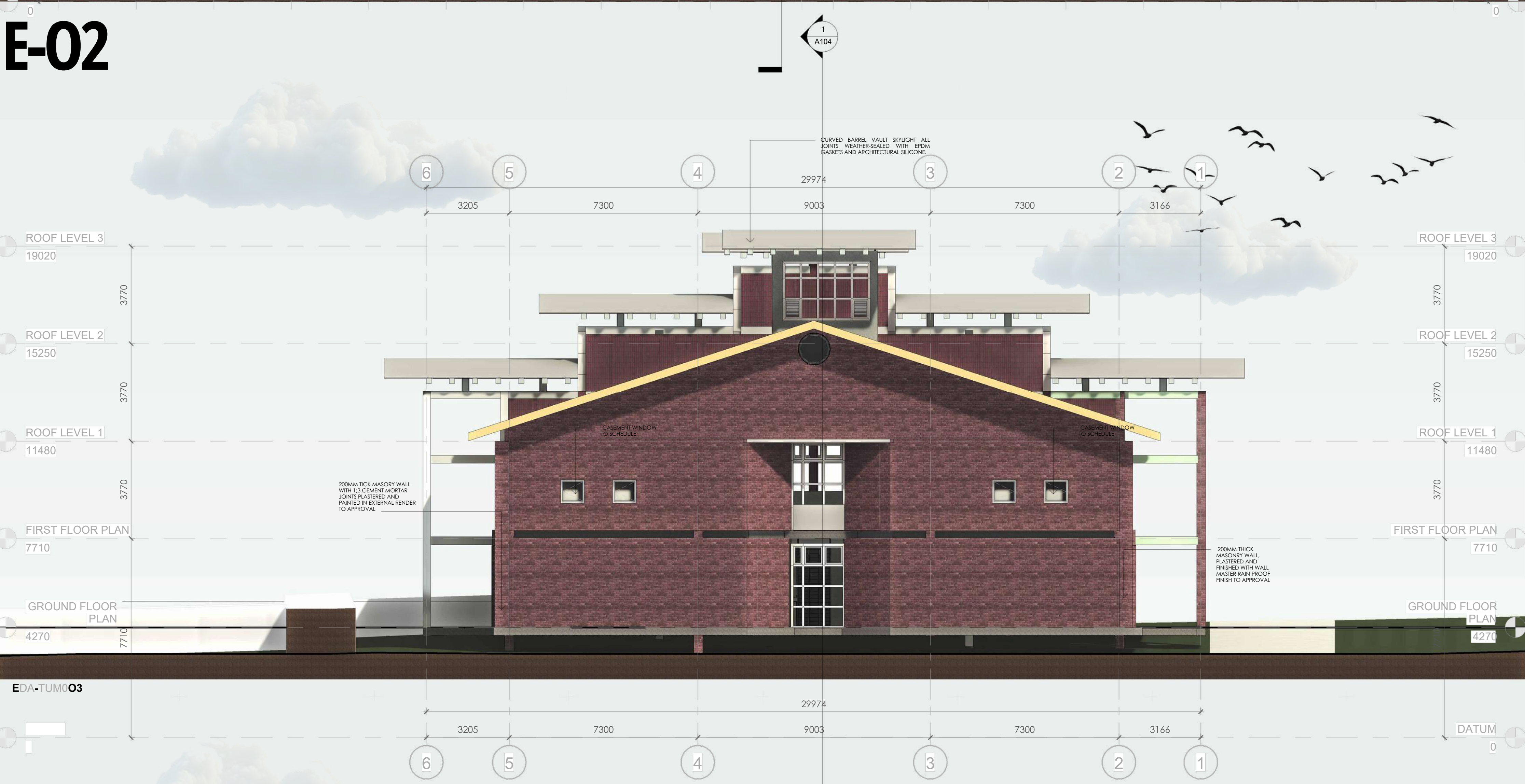
Final mass includes a building that has key strategies such as;
 Passive Design Strategy: Using the building's shape to manage climate.
 Building Porosity: The gaps that allow air and light to move through.
 Environmental Stewardship: Showing that the design cares about the campus ecosystem.

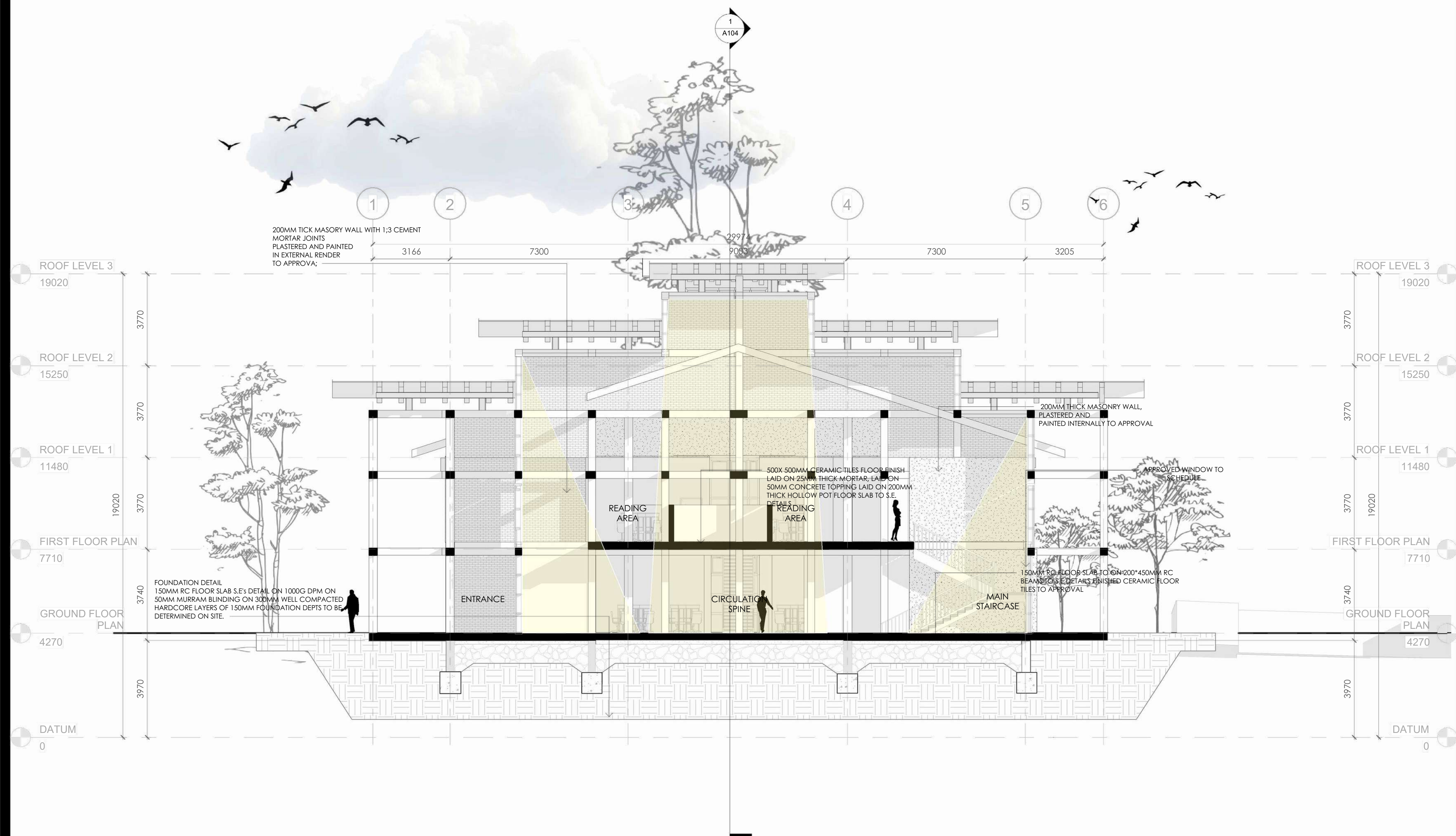
ELEVATIONS

E-01

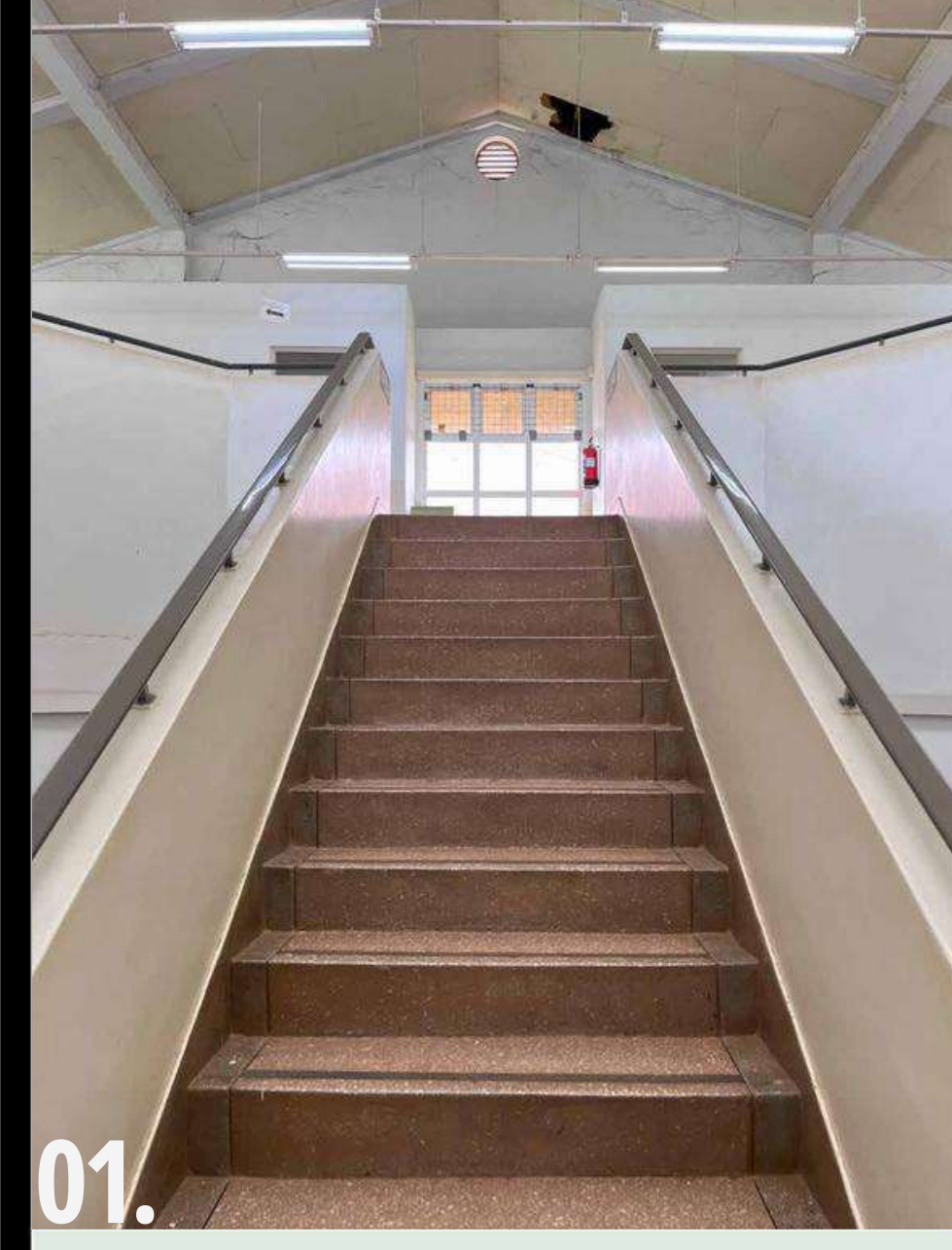
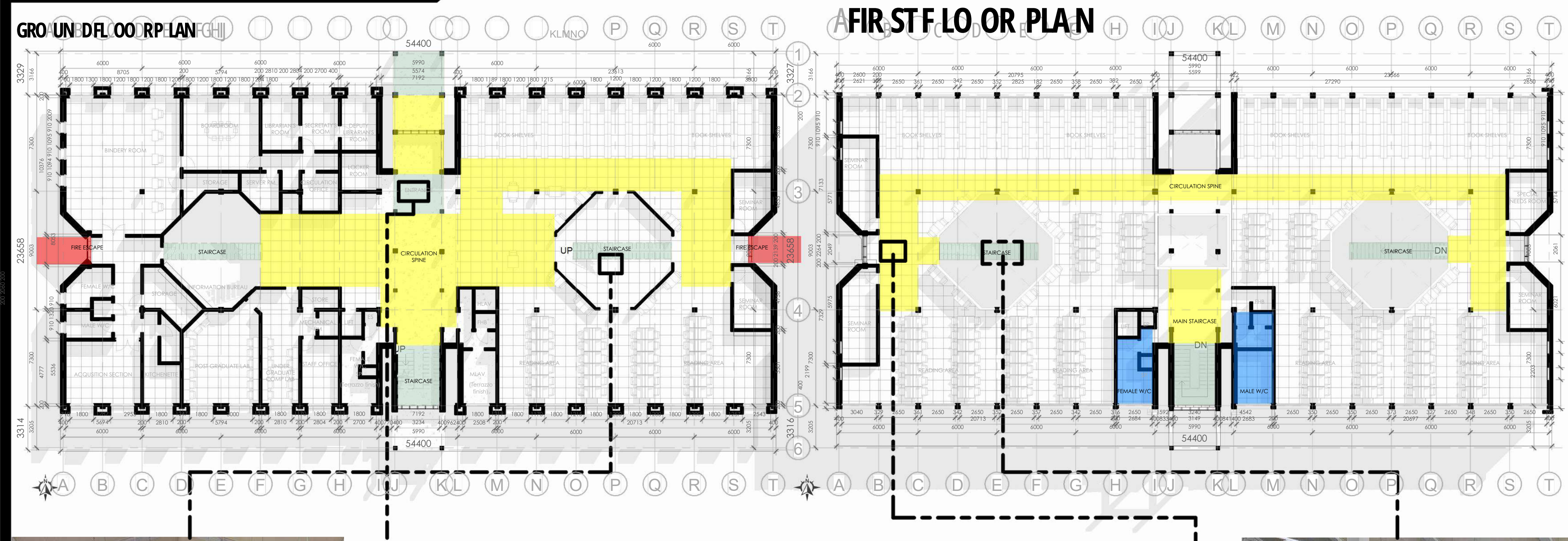


E-02





ACCESSIBILITY AUDIT



01.

CONDITION: SURFACE FINISH ON TREADS SHOWS MINOR ABRASIVE WEAR; MASONRY PARAPETS ARE STRUCTURALLY SOUND WITH NO VISIBLE CRACKING. A LOCALIZED MOISTURE STAIN IS PRESENT ON THE GABLE APEX SOFFIT, SUGGESTING A FAILURE IN THE ROOF RIDGE FLASHING.

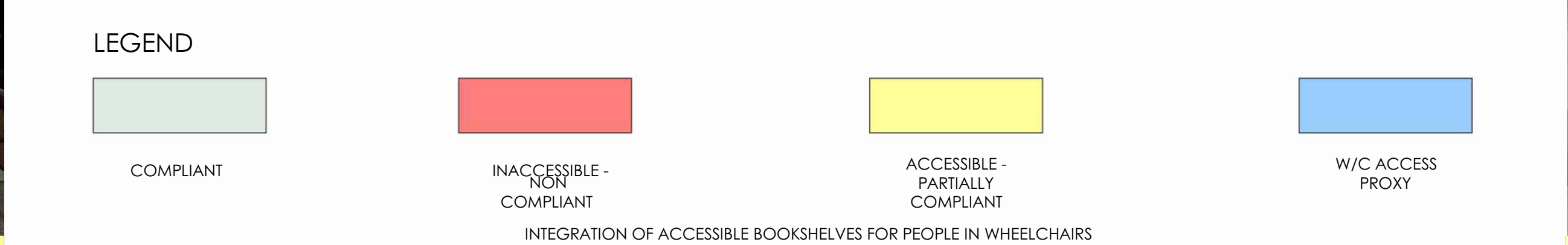
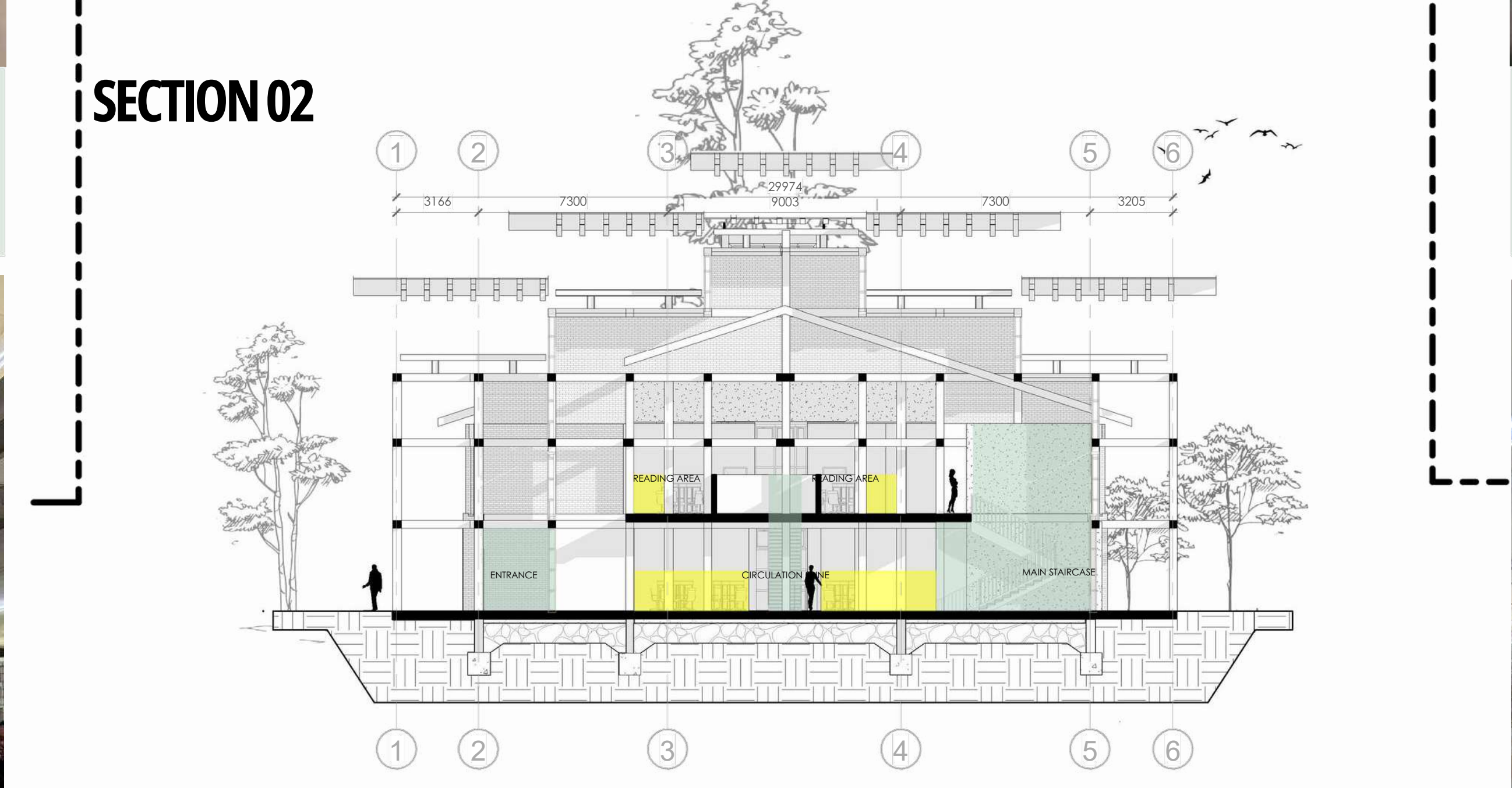
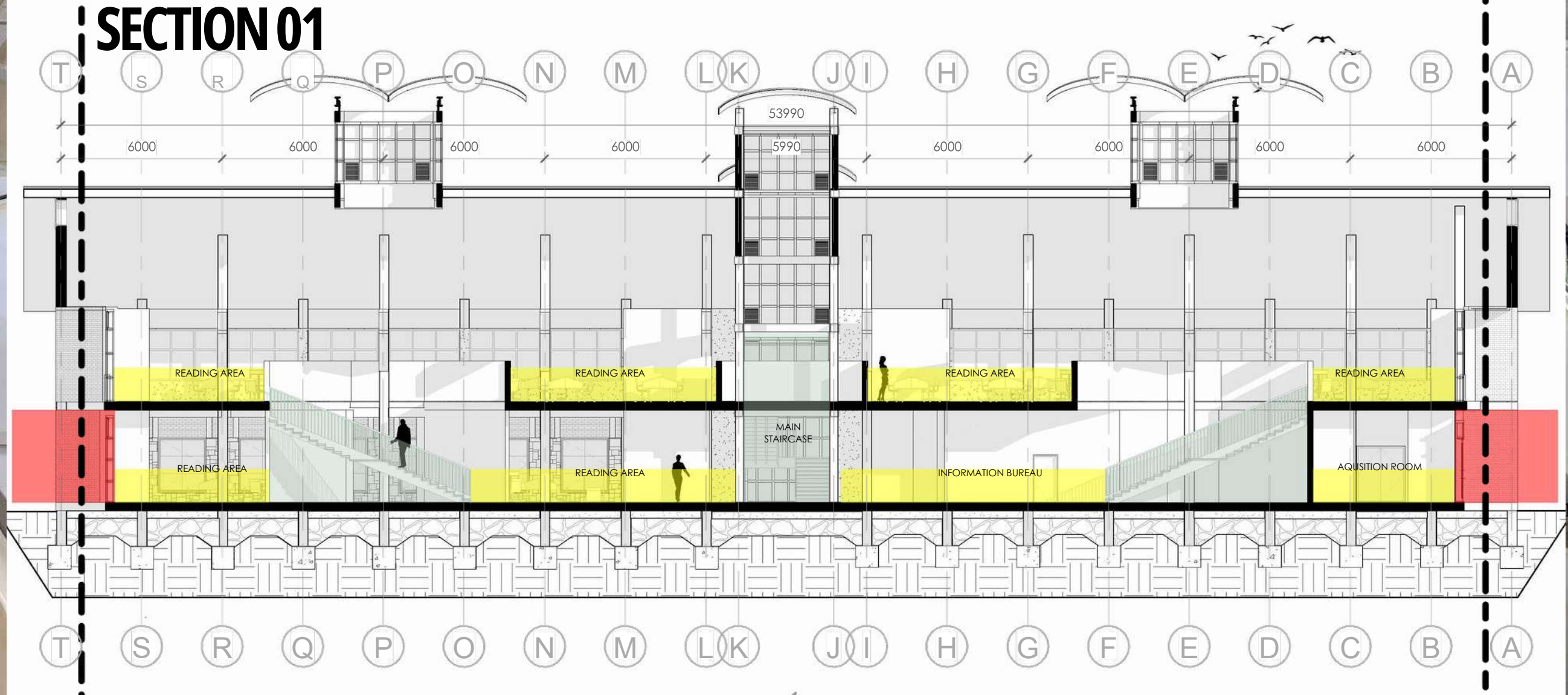
ACCESSIBILITY: NON-COMPLIANT HANDRAIL PROFILE (LACKS CIRCULARITY FOR POWER GRIP); ABSENCE OF TACTILE HAZARD INDICATORS (TGSIS) AT THE TOP OF THE FLIGHT.



03.

CONDITION: HIGH-TRAFFIC FLOOR ZONE SHOWS MATERIAL FAILURE; SPECIFIC INSTANCES OF CRACKED AND MISSING TERRAZZO TILES CREATING AN UNEVEN SUBSTRATE. SECURITY GATE INFRASTRUCTURE IS OPERATIONAL BUT LACKS PROTECTIVE CURBING AT THE BASE TO PREVENT IMPACT DAMAGE.

ACCESSIBILITY: FLOOR SURFACE DEGRADATION CONSTITUTES A TRIP HAZARD AND IMPEDES THE SMOOTH OPERATION OF SMALL-WHEELED MOBILITY AIDS. SECURITY STANCHION CLEAR-WIDTH MUST BE FIELD-VERIFIED TO ENSURE A MINIMUM 900MM PASSAGE FOR ADA/LOCAL COMPLIANCE



02.

CONDITION: CONCRETE STRINGERS AND GUARDRAILS SHOW NO SIGNS OF STRUCTURAL DEFLECTION; FLOOR TILES ON THE UPPER LANDING REMAIN WELL-BONDED. ACCUMULATION OF LOOSE LIBRARY STOCK AT THE BASE CREATES A LOCALIZED FIRE LOAD AND FLOOR-LOADING CONCERN.

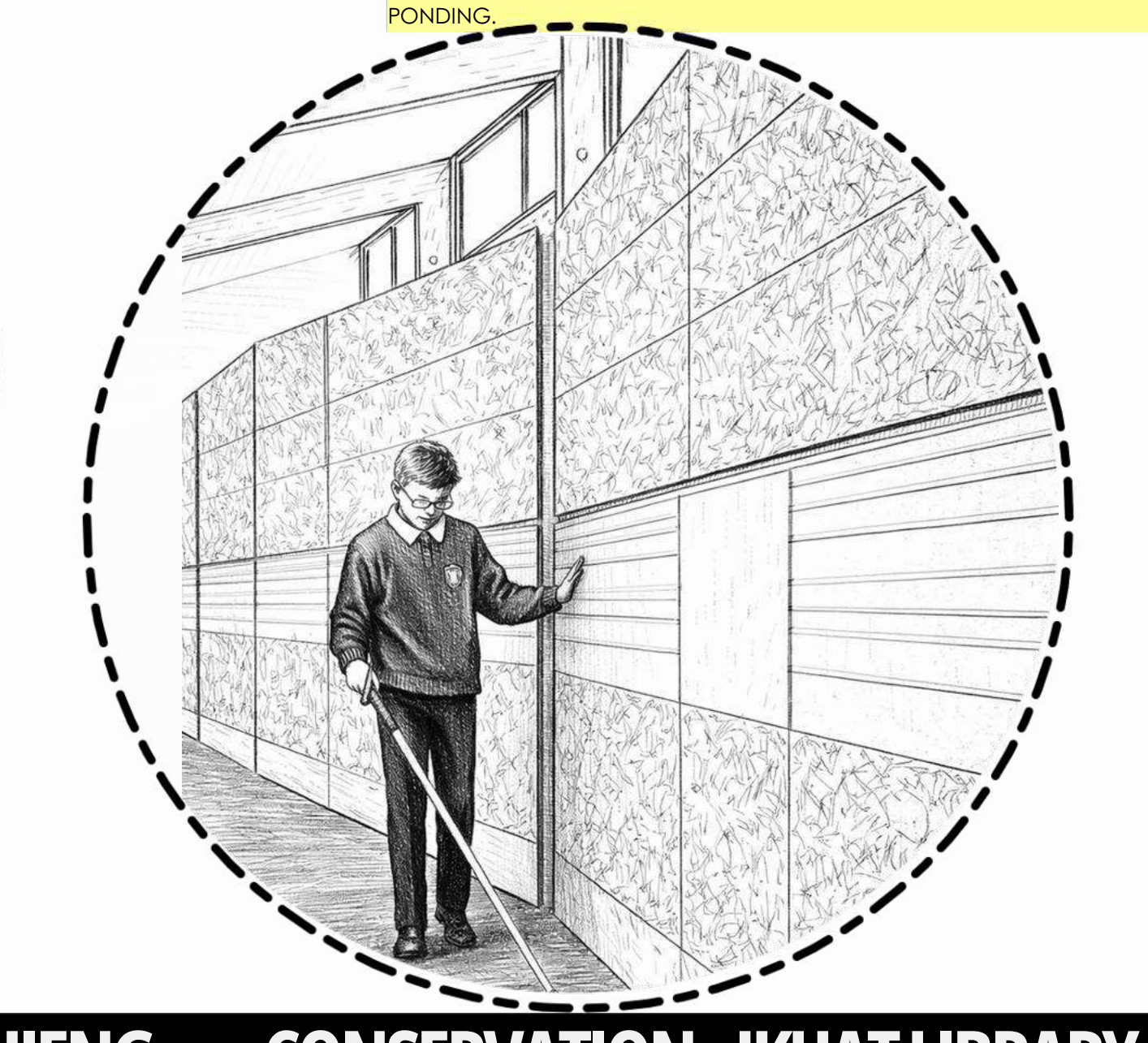
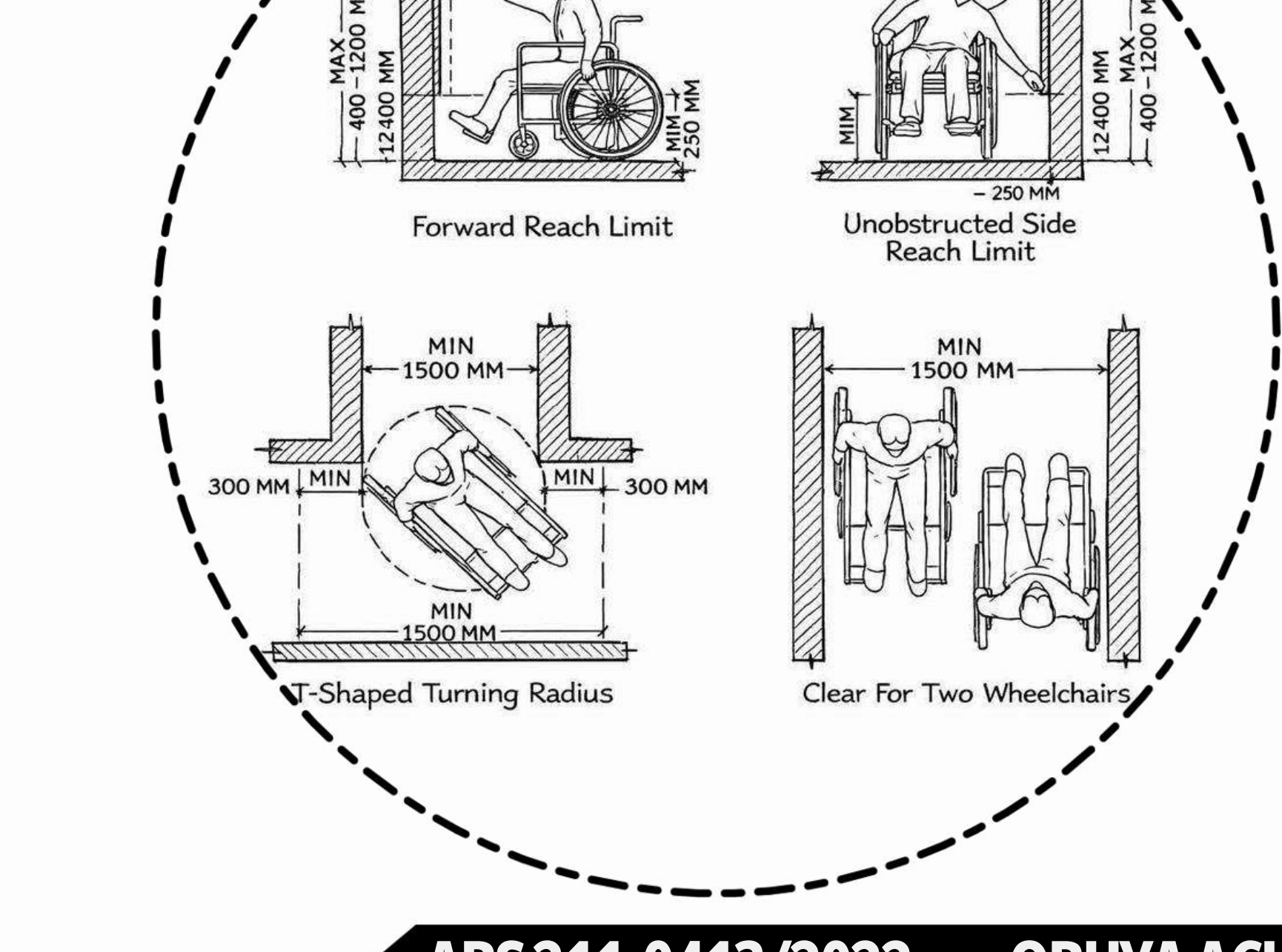
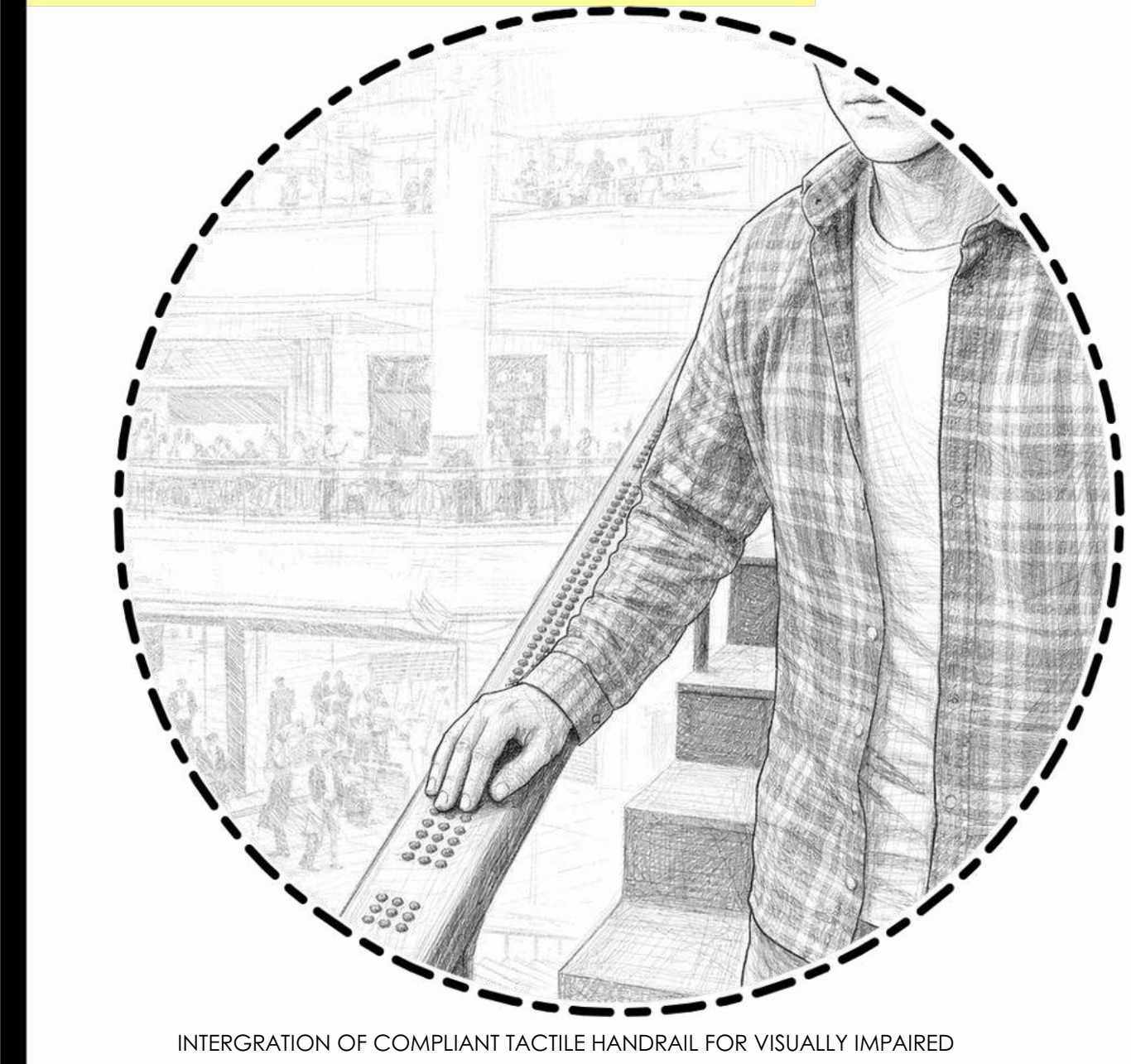
ACCESSIBILITY: SOLID PARAPET DESIGN LACKS A SECONDARY 'LOWER-LEVEL' HANDRAIL FOR CHILDREN OR SHORTER USERS. HIGH-GLOSS FLOOR FINISH EXCEEDS RECOMMENDED SLIP-RESISTANCE COEFFICIENTS, INCREASING FALL RISK WHEN WET.



04.

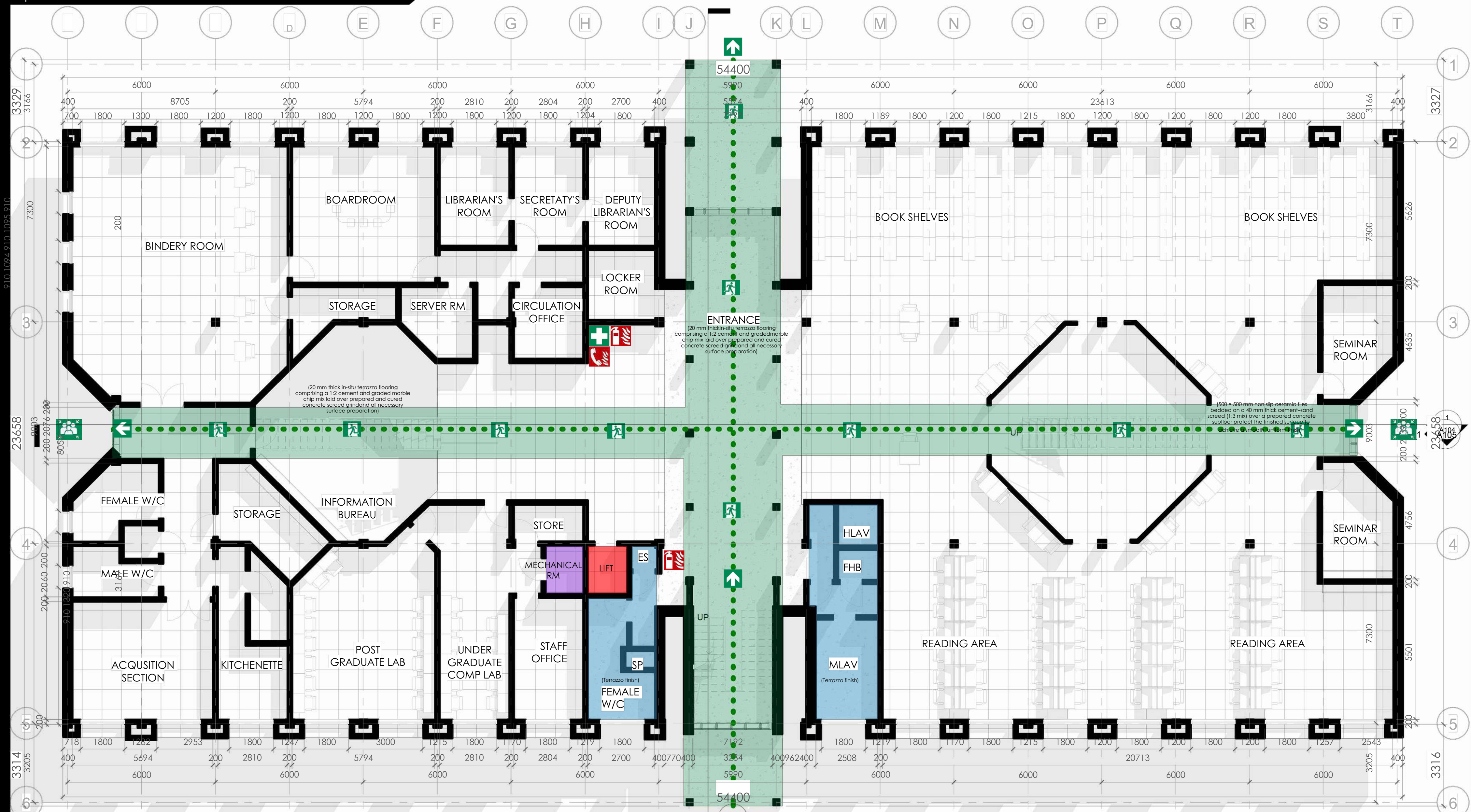
CONDITION: SIGNIFICANT ACTIVE MOISTURE INGRESS AND DAMP STAINING VISIBLE ON THE VAULTED CEILING PANELS, SPECIFICALLY AROUND THE SKYLIGHT PERIMETER AND STRUCTURAL RIBS. FLOOR TILES AT THE STAIR LANDING SHOW VARIED DISCOLORATION, LIKELY DUE TO A COMBINATION OF HIGH-TRAFFIC WEAR AND HISTORICAL WATER DRIPPING FROM THE CEILING LEAKS.

ACCESSIBILITY: THE TRANSITION AREA LACKS TACTILE HAZARD FLOORING TO ALERT VISUALLY IMPAIRED USERS TO THE APPROACHING STAIRWELL DESCENT. POLISHED TILE SURFACES NEAR KNOWN LEAK POINTS POSE A HIGH SLIP-AND-FALL RISK DUE TO POTENTIAL INTERMITTENT SURFACE PONDING

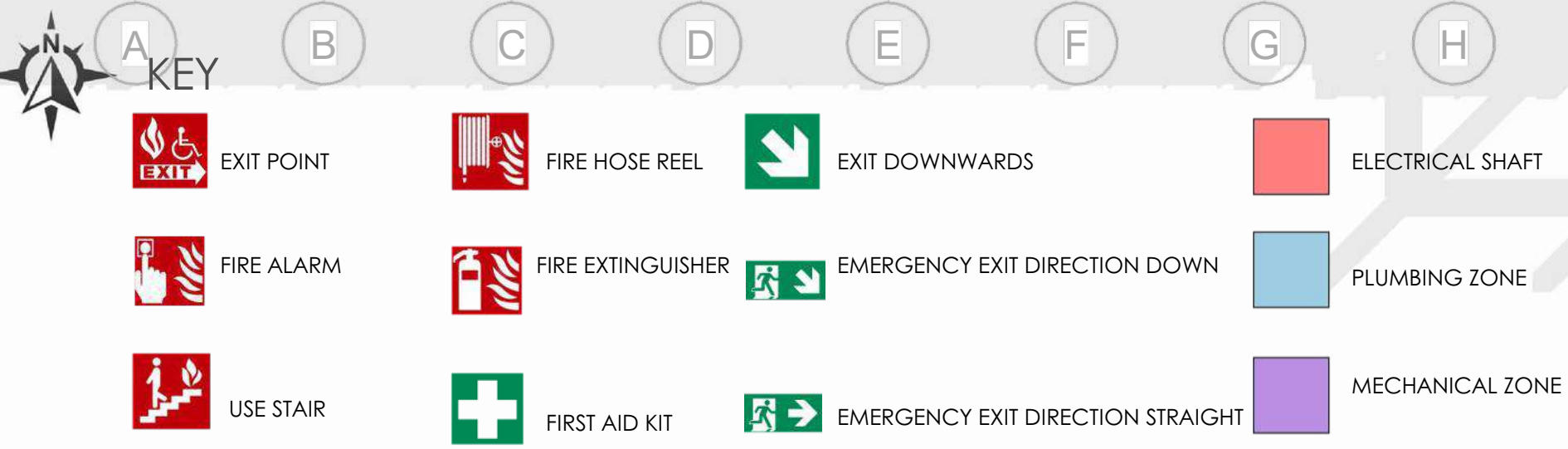
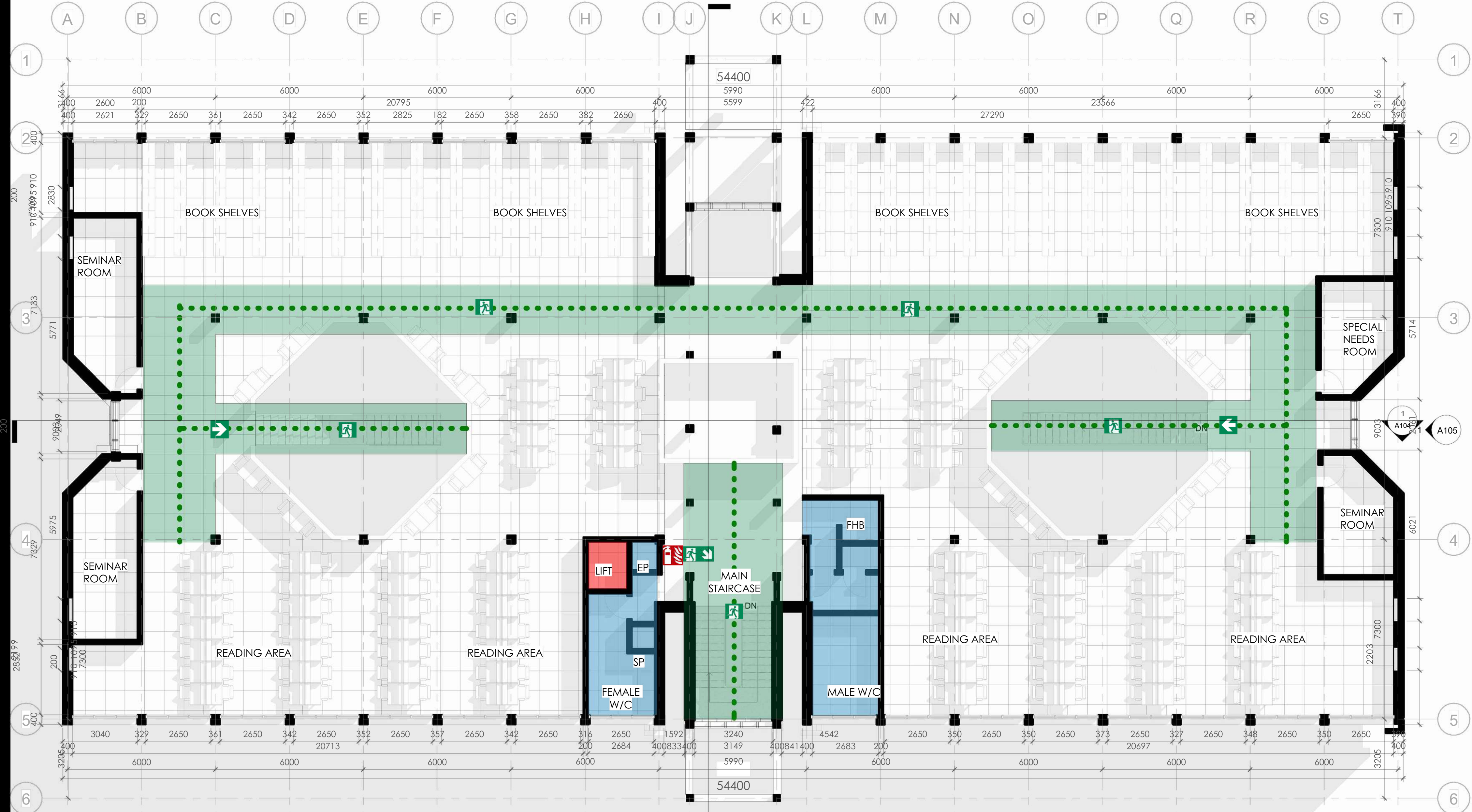


SERVICES

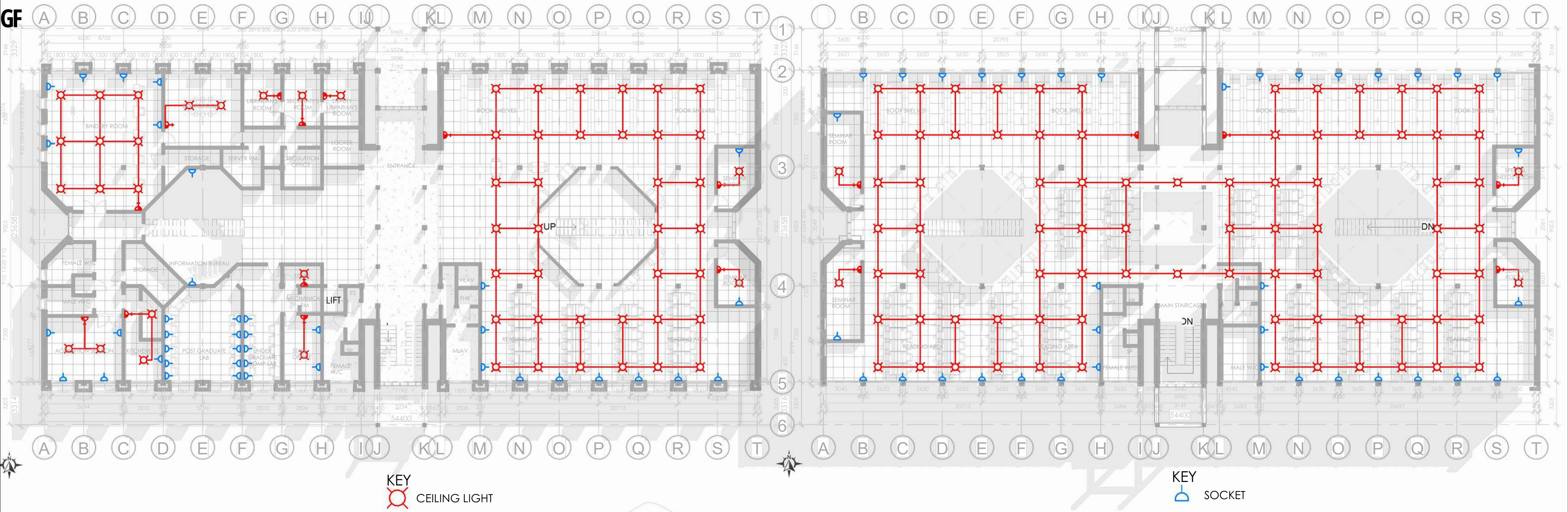
2



FIRST FLOOR



SERVICES AUDIT



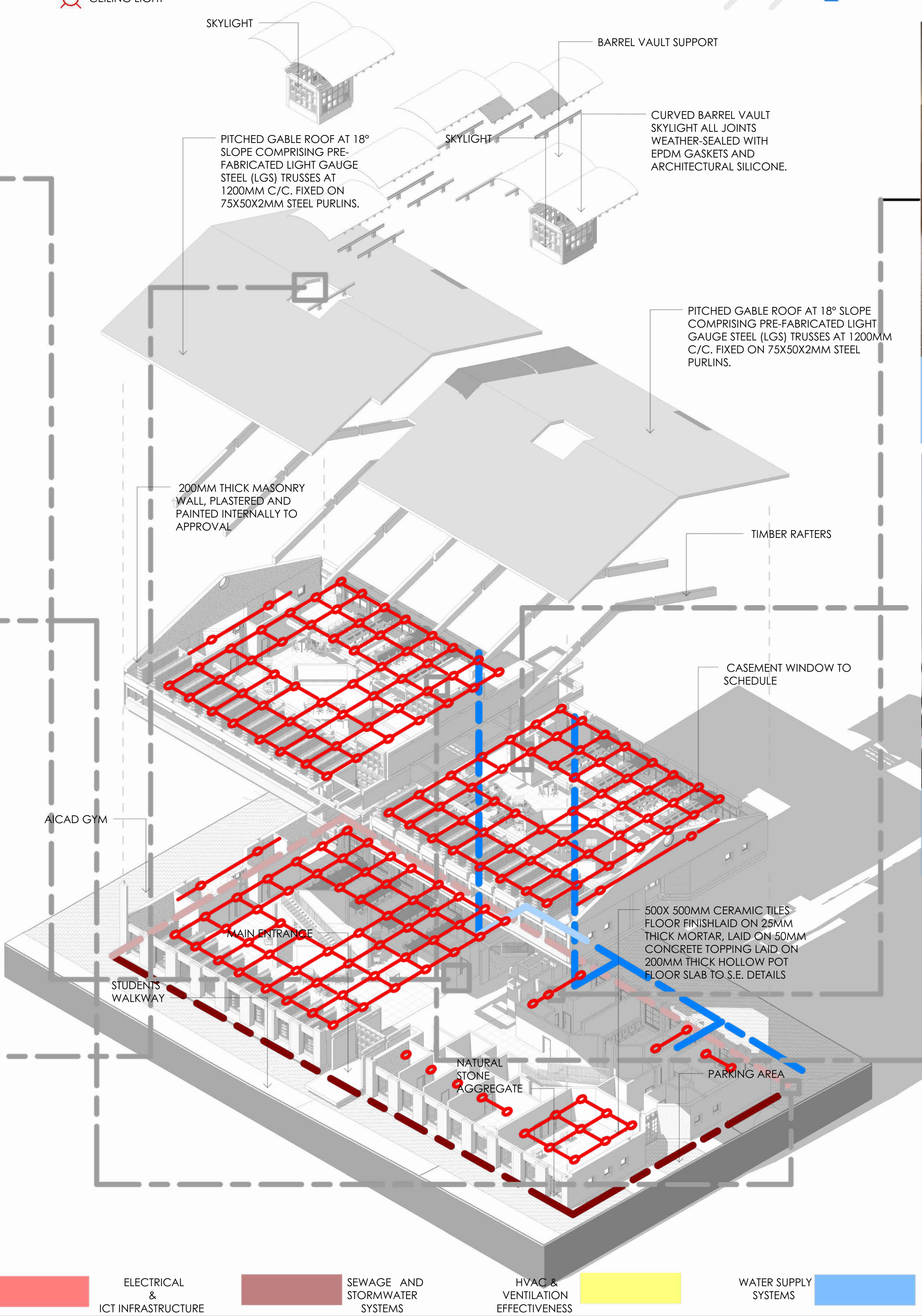
VISIBLE DEFECTS INCLUDE MISSING FAUCETS AND EXPOSED PLUMBING. WALL TILES SHOW SIGNIFICANT STAINING AND DISCOLORATION. A LARGE BLUE BUCKET SUGGESTS POSSIBLE DRAINAGE ISSUES OR WATER SUPPLY INCONSISTENCIES.



THE DRAINAGE OPENING IS MISSING ITS PROTECTIVE COVER, LEAVING THE PIPE EXPOSED. DEBRIS AND ORGANIC MATTER HAVE ACCUMULATED INSIDE, CAUSING A SIGNIFICANT BLOCKAGE THAT LIKELY IMPEDES WATER FLOW.



SEVERE WATER SEEPAGE THROUGH DARK STAINING AND MOISTURE PATTERNS ON THE CONCRETE SOFFIT. SUSPENDED FLUORESCENT LIGHTING FIXTURES ARE POSITIONED DIRECTLY BENEATH THESE DAMP AREAS, INDICATING A HIGH-RISK ELECTRICAL HAZARD.



SIGNIFICANT MOISTURE DAMAGE IS VISIBLE AT THE BASE OF THE PARTITION WALL. THE FLOOR SHOWS EXTENSIVE WET PATCHES AND STAINING AROUND THE FLOOR TRAP, SUGGESTING RECURRING DRAINAGE OVERFLOW OR LEAKS.



THE TOILET LACKS A CISTERN/FLUSHING MECHANISM. NOTABLE FLOOR DETERIORATION AND DARK STAINING ARE PRESENT ALONG THE PARTITION BASE. THE WINDOW LACKS PROPER GLAZING, AND THE TOILET PAPER HOLDER IS DAMAGED.



THE URINALS EXHIBIT HEAVY SURFACE STAINING AND BROWN SCALE BUILDUP, PARTICULARLY AROUND THE RIM AND SPREADER. THIS INDICATES PROLONGED LACK OF MAINTENANCE AND POTENTIALLY MALFUNCTIONING FLUSH VALVES.

ELECTRICAL & ICT INFRASTRUCTURE	SEWAGE AND STORMWATER SYSTEMS	HVAC & VENTILATION EFFECTIVENESS	WATER SUPPLY SYSTEMS (POTABLE/INPUT)
TRUNKING & DISTRIBUTION: REPLACE ALL DAMAGED SURFACE-MOUNTED TRUNKING WITH DURABLE UPVC OR GALVANIZED STEEL CONDUITS AGAINST MECHANICAL DAMAGE. LIGHTING CONTROL: INSTALL PIR MOTION SENSORS AND PHOTOCELL HEADERS. SINCE THE LIBRARY HAS HIGH DAYLIGHT AVAILABILITY, THESE WILL AUTOMATICALLY KILL THE LIGHTS BETWEEN 8 AM AND 5 PM WHEN NATURAL LUX LEVELS ARE SUFFICIENT. COST EFFICIENCY: TRANSITIONING TO LED AND AUTOMATED SWITCHING CAN REDUCE CURRENT INSTITUTIONAL ENERGY COSTS BY APPROXIMATELY 30-40%.	SILT & DEBRIS CLEARING: MANUALLY EXTRACT ORGANIC MATTER AND TRASH FROM ALL EXTERNAL STORM DRAIN OPENINGS AND INTERNAL FLOOR TRAPS. PROTECTIVE GRATINGS: INSTALL HEAVY-DUTY, LOCKABLE CAST IRON OR REINFORCED CONCRETE GRATINGS OVER ALL EXPOSED DRAIN W/IN LETS TO PREVENT FUTURE BLOCKAGES. SANITARY SEALING: RE-GROUT AND SEAL THE BASE OF URINALS AND WATER CLOSETS. THIS STOPS FOUL WATER FROM SEEPING INTO THE FLOOR SLAB AND PREVENTS THE CAPILLARY MOISTURE DAMAGE CURRENTLY ROTTING THE PARTITION BASES.	PASSIVE VS. ACTIVE: SINCE THE HVAC IS DORMANT, PRIORITIZE PASSIVE COOLING. REPAIR THE MALALIGNED TOP-HUNG WINDOWS TO RESTORE THE BUILDING'S "VERNACULAR INTELLIGENCE" AND NATURAL CROSS-VENTILATION. SEALANT REPAIR: REPLACE FAILED WINDOW SEALANTS TO PREVENT DUST INFILTRATION, WHICH CURRENTLY COMPROMISES A BOOK PRESERVATION AND INDOOR AIR QUALITY.	CISTERN INSTALLATION: PROVIDE NEW DUAL-PAIR FLUSH CISTERNS FOR ALL TOILETS CURRENTLY LACKING A FLUSHING MECHANISM TO RESTORE HYGIENE AND WATER CONSERVATION. FIXTURE REPLACEMENT: REPLACE MISSING OR DAMAGED FAUCETS WITH PRESSURE-COMPENSATED, SELF-CLOSING TAPS (DELAY-ACTION) TO ELIMINATE THE NEED FOR MANUAL BUCKET-FILLING AND REDUCE WASTAGE. LEAK SEALING: CONDUCT A PRESSURE TEST ON THE INTERNAL PIPE NETWORK TO IDENTIFY AND SEAL SILENT LEAKS BEHIND WALL TILES WHERE STAINING IS MOST PROMINENT.

BRIEF ANALYSIS

ZONE	SPACE	FUNCTION	FUNCTIONAL REQUIREMENTS	SPATIAL CONSIDERATION	CAPACITY AREA VOLUME
WELLNESS & RELAXATION SPACES	QUIET LOUNGE	REST & REFLECTION	SOFT SEATING	CALM, LOW NOISE	40–80 M² / 20–40 PEOPLE
	MEDITATION ROOM	MENTAL WELLNESS	MINIMAL FURNITURE	ISOLATED	30–60 M² / 10–20 PEOPLE
	SOFT READING ZONE	COMFORTABLE READING	LOUNGE SEATING	NATURAL LIGHT	50–90 M² / 20–40 PEOPLE
	REST PODS	SHORT REST	ENCLOSED PODS	QUIET CORNERS	20–40 M² / 10–20 PEOPLE
	INDOOR GARDEN	BIOPHILIC SPACE	PLANTS, SEATING	DAYLIGHT, VENTILATION	60–120 M² / 30–60 PEOPLE

ZONE	SPACE	FUNCTION	FUNCTIONAL REQUIREMENTS	SPATIAL CONSIDERATION	CAPACITY AREA VOLUME
FOOD & REFRESHMENT SPACES	CAFÉ	FOOD & SOCIAL	KITCHEN, SEATING	ACCESSIBLE, VENTILATED	100–150 M² / 50–80 PEOPLE
	COFFEE KIOSK	QUICK SERVICE	COUNTER, STORAGE	HIGH TRAFFIC AREAS	20–40 M² / 10–20 PEOPLE
	SNACK BAR	LIGHT MEALS	DISPLAY, SEATING	NEAR SOCIAL ZONES	30–60 M² / 15–30 PEOPLE
	VENDING AREA	SELF-SERVICE	MACHINES, CIRCULATION	TRANSITIONAL SPACES	10–20 M² / 5–10 PEOPLE

ZONE	SPACE	FUNCTION	FUNCTIONAL REQUIREMENTS	SPATIAL CONSIDERATION	CAPACITY AREA VOLUME
OUTDOOR LEARNING	READING GARDEN	OUTDOOR STUDY	SEATING, SHADING	LANDSCAPE INTEGRATION	80–150 M² / 40–80 PEOPLE
	AMPHITHEATRE	GROUP LEARNING	TIERED SEATING	ORIENTATION, ACOUSTICS	100–200 M² / 60–120 PEOPLE
	STUDY TERRACE	SEMI-OUTDOOR STUDY	TABLES, SHADING	UPPER LEVELS	60–120 M² / 30–60 PEOPLE
	COURTYARD SPACE	INFORMAL LEARNING	OPEN SEATING	CENTRAL LOCATION	80–150 M² / 40–80 PEOPLE
	PAVILION	COVERED STUDY	SHELTER, SEATING	LANDSCAPE NODES	40–80 M² / 20–40 PEOPLE

ZONE	SPACE	FUNCTION	FUNCTIONAL REQUIREMENTS	SPATIAL CONSIDERATION	CAPACITY AREA VOLUME
RESEARCH SPACES	RESEARCH ROOMS	ACADEMIC WORK	DESKS, STORAGE	QUIET ZONES	60–100 M² / 30–50 PEOPLE
	ARCHIVE ROOMS	STORAGE	SHELVING, CLIMATE CONTROL	CONTROLLED ACCESS	50–90 M² / 20–40 PEOPLE
	SPECIAL COLLECTIONS	RARE MATERIALS	SECURITY, DISPLAY	ISOLATED	40–80 M² / 15–30 PEOPLE
	POSTGRAD ROOMS	ADVANCED STUDY	DESKS, PRIVACY	QUIET	50–90 m² / 20–40 people
	REFERENCE SECTION	STUDY RESOURCES	SHELVING, SEATING	ACCESSIBLE	80–120 M² / 40–60 PEOPLE

ZONE	SPACE	FUNCTION	FUNCTIONAL REQUIREMENTS	SPATIAL CONSIDERATION	CAPACITY AREA VOLUME
YOUTH & CHILDREN SPACES	CHILDREN'S READING	EARLY LEARNING	LOW SHELVES, SEATING	BRIGHT, SAFE	60–100 M² / 30–50 PEOPLE
	STORYTELLING AREA	GROUP LEARNING	OPEN SEATING	FLEXIBLE, CENTRAL	40–80 M² / 20–40 PEOPLE
	ACTIVITY ZONE	PLAY-LEARNING	OPEN FLOOR	DURABLE FINISHES	60–100 M² / 30–50 PEOPLE
	TEEN STUDY AREA	YOUTH STUDY	DESKS, TECH ACCESS	SEMI-PRIVATE	50–90 M² / 20–40 PEOPLE
	INTERACTIVE CORNER	LEARNING TOOLS	DISPLAYS, TECH	ACCESSIBLE	30–60 M² / 15–30 PEOPLE

BRIEF ANALYSIS

ZONE	SPACE	FUNCTION	FUNCTIONAL REQUIREMENTS	SPATIAL CONSIDERATION	CAPACITY AREA VOLUME
SOCIAL SPACES	CAFÉ SEATING AREA	INFORMAL DINING & INTERACTION	SEATING, TABLES, PROXIMITY TO SERVICE, WASTE POINTS	NEAR ENTRANCE/OUTDOOR, NATURAL LIGHT, VENTILATION	80–120 M² / 40–60 PEOPLE
	LOUNGE AREA	RELAXED READING & SOCIALIZING	SOFT SEATING, CHARGING POINTS, FLEXIBLE FURNITURE	QUIET BUT ACCESSIBLE, DAYLIGHT, VISUAL CONNECTION	60–100 M² / 30–50 PEOPLE
	GROUP DISCUSSION AREA	COLLABORATIVE LEARNING	TABLES, WRITABLE SURFACES, POWER OUTLETS	SEMI-ENCLOSED, ACOUSTIC CONTROL	40–80 M² / 20–40 PEOPLE
	COMMUNITY ENGAGEMENT AREA	EVENTS & PUBLIC INTERACTION	OPEN FLOOR, MOVABLE SEATING, DISPLAY CAPABILITY	HIGHLY ACCESSIBLE, NEAR ENTRANCE	80–150 M² / 50–100 PEOPLE
	EVENT SPILL-OUT AREA	OVERFLOW FOR EVENTS	OPEN FLEXIBLE SPACE, MINIMAL FIXED FURNITURE	ADJACENT TO MAIN EVENT ZONES, OUTDOOR LINK	60–120 M² / 40–80 PEOPLE

ZONE	SPACE	FUNCTION	FUNCTIONAL REQUIREMENTS	SPATIAL CONSIDERATION	CAPACITY AREA VOLUME
DIGITAL SPACES	COMPUTER LAB	ACCESS TO DIGITAL RESOURCES	DESKS, COMPUTERS, DATA POINTS, COOLING	CONTROLLED LIGHTING, VENTILATION	80–120 M² / 40–60 PEOPLE
	E-LEARNING STATIONS	INDIVIDUAL DIGITAL STUDY	WORKSTATIONS, POWER, INTERNET	QUIET ZONES, MINIMAL DISTRACTION	40–80 M² / 20–40 PEOPLE
	MEDIA ROOM	AUDIO-VISUAL LEARNING	SCREENS, ACOUSTICS, SEATING	ENCLOSED, SOUNDPROOFED	50–90 M² / 20–40 PEOPLE
	VR/AR ZONE	IMMERSIVE LEARNING	OPEN SPACE, EQUIPMENT CLEARANCE	FLEXIBLE LAYOUT, LOW OBSTRUCTION	40–70 M² / 15–30 PEOPLE
	DIGITAL RESEARCH HUB	ADVANCED DIGITAL WORK	HIGH-SPEED INTERNET, SHARED DESKS	NEAR RESEARCH AREAS, QUIET	60–100 M² / 30–50 PEOPLE

ZONE	SPACE	FUNCTION	FUNCTIONAL REQUIREMENTS	SPATIAL CONSIDERATION	CAPACITY AREA VOLUME
FOCUSED STUDY SPACES	DEEP FOCUS PODS	INDIVIDUAL CONCENTRATION	ENCLOSED BOOTHS, LIGHTING	ACOUSTIC ISOLATION	20–40 M² / 10–20 PEOPLE
	SILENT READING ROOM	QUIET STUDY	DESKS, CHAIRS, LIGHTING	NOISE CONTROL, NATURAL LIGHT	80–150 M² / 40–80 PEOPLE
	STUDY CARRELS	PRIVATE STUDY	PARTITIONED DESKS, LIGHTING	LINEAR ARRANGEMENT, QUIET ZONES	40–80 M² / 20–40 PEOPLE
	ENCLOSED CUBICLES	ISOLATED WORK	SMALL ENCLOSED UNITS	PRIVACY, MINIMAL DISTRACTION	30–60 M² / 15–30 PEOPLE

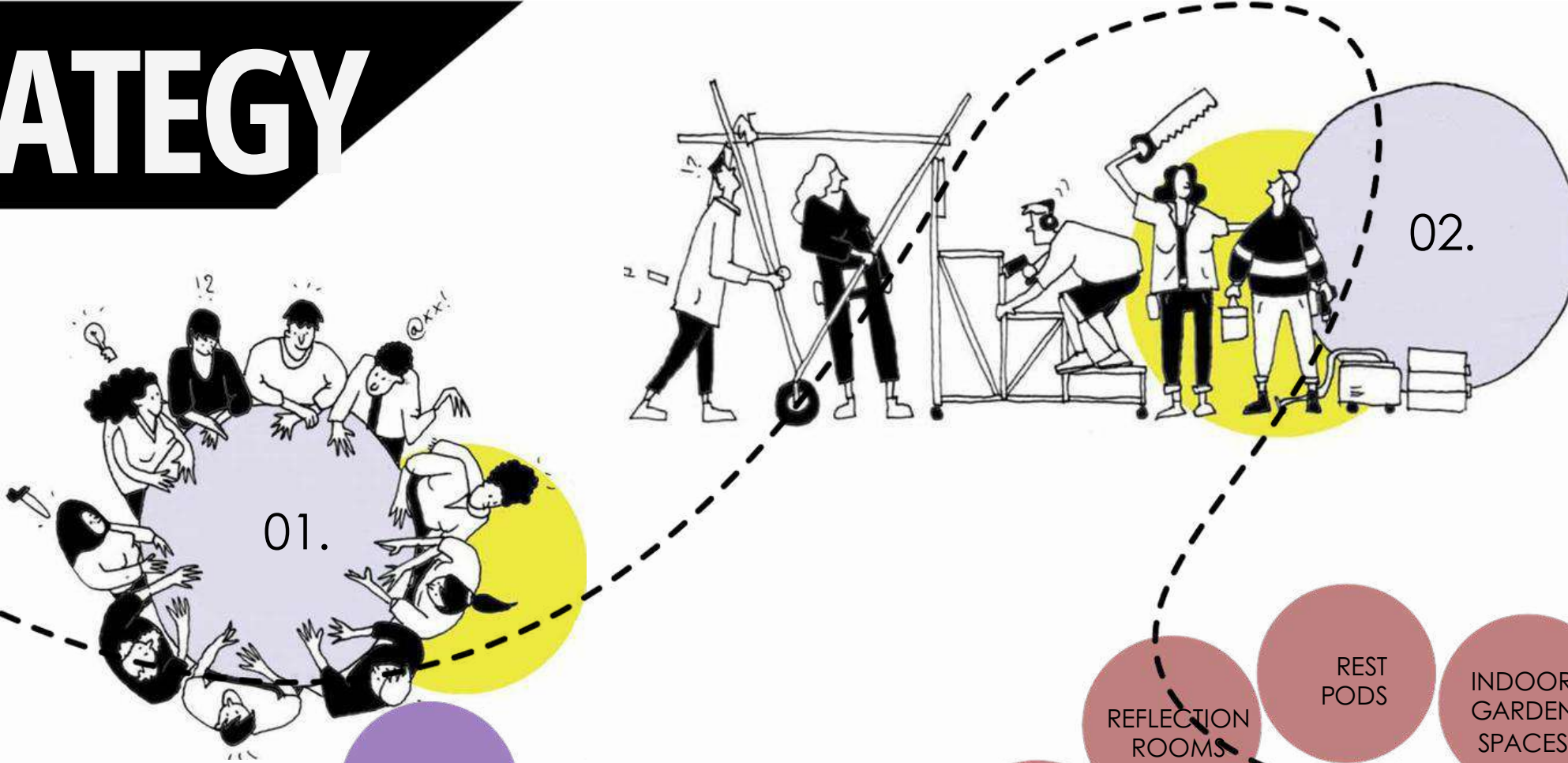
ZONE	SPACE	FUNCTION	FUNCTIONAL REQUIREMENTS	SPATIAL CONSIDERATION	CAPACITY AREA VOLUME
INNOVATION SPACES	INNOVATION LAB	CREATIVE COLLABORATION	FLEXIBLE FURNITURE, TOOLS	OPEN PLAN, ADAPTABLE	80–140 M² / 40–70 PEOPLE
	MAKER SPACE	HANDS-ON CREATION	WORKBENCHES, STORAGE	DURABLE FINISHES, VENTILATION	80–120 M² / 30–50 PEOPLE
	FAB LAB	DIGITAL FABRICATION	MACHINES, SAFETY ZONES	CONTROLLED ACCESS, SERVICES	60–100 M² / 20–40 PEOPLE
	DESIGN THINKING ROOM	IDEATION	WRITABLE WALLS, FLEXIBLE SEATING	INTERACTIVE LAYOUT	50–80 M² / 20–40 PEOPLE
	PROJECT ROOMS	GROUP WORK	TABLES, SCREENS	SEMI-PRIVATE, ACOUSTIC CONTROL	40–80 M² / 20–40 PEOPLE

ZONE	SPACE	FUNCTION	FUNCTIONAL REQUIREMENTS	SPATIAL CONSIDERATION	CAPACITY AREA VOLUME
EXHIBITION & DISPLAY SPACES	BOOK DISPLAY AREA	SHOWCASE COLLECTIONS	SHELVING, LIGHTING	VISIBLE CIRCULATION ZONES	40–80 M² / 20–40 PEOPLE
	EXHIBITION GALLERY	ROTATING EXHIBITS	DISPLAY PANELS, LIGHTING	FLEXIBLE, OPEN FLOW	80–150 M² / 40–80 PEOPLE
	ARCHIVE SHOWCASE	SPECIAL COLLECTIONS	CONTROLLED ENVIRONMENT	SECURE, LOW LIGHT	40–70 M² / 15–30 PEOPLE
	INTERACTIVE DISPLAY	DIGITAL EXHIBITS	SCREENS, TECH INTEGRATION	ACCESSIBLE, VISIBLE	30–60 M² / 15–30 PEOPLE
	EXHIBITION CORRIDOR	LINEAR DISPLAY	WALL DISPLAYS, LIGHTING	CIRCULATION INTEGRATED	30–70 M² / 20–40 PEOPLE

SPATIAL STRATEGY

DESIGN PHILOSOPHY ECO-CENTRIC DESIGN

Eco-centric design shapes library spaces by aligning social, digital, and research zones with natural light, ventilation, and landscape, enhancing comfort, reducing energy use, and supporting well-being.



METHODS OF CONSERVATION

ADAPTIVE RE-USE

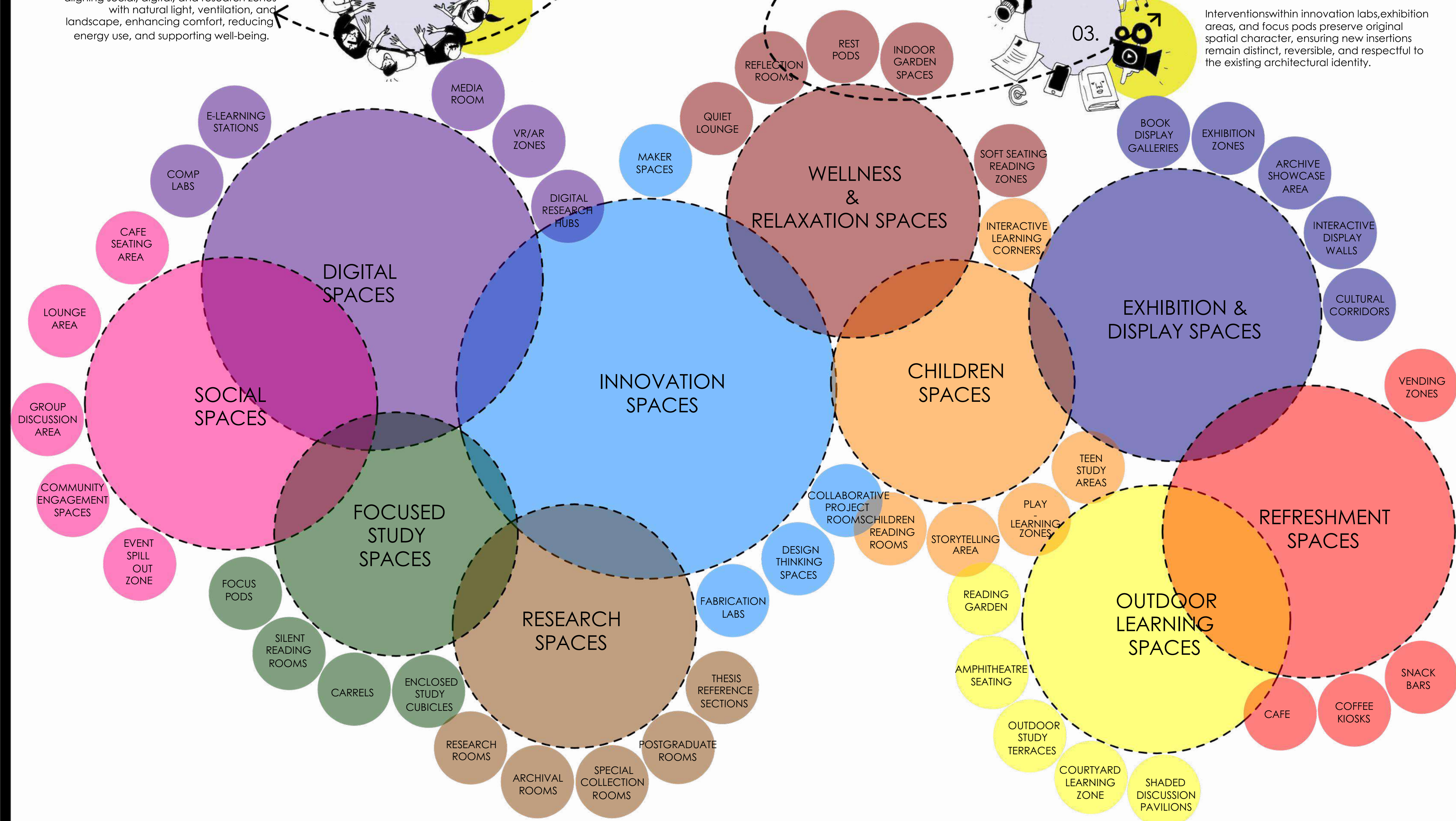
Adaptive reuse transforms underutilized areas into social hubs, digital zones, and youth spaces, allowing the library to evolve functionally while maintaining its structural and cultural continuity.



PRINCIPLES OF INTERVENTION

AUTHENTICITY & INTEGRITY

Interventions within innovation labs, exhibition areas, and focus pods preserve original spatial character, ensuring new insertions remain distinct, reversible, and respectful to the existing architectural identity.



KEY

TO BE DEMOLISHED TO BE REPLACED

PUBLIC ZONE

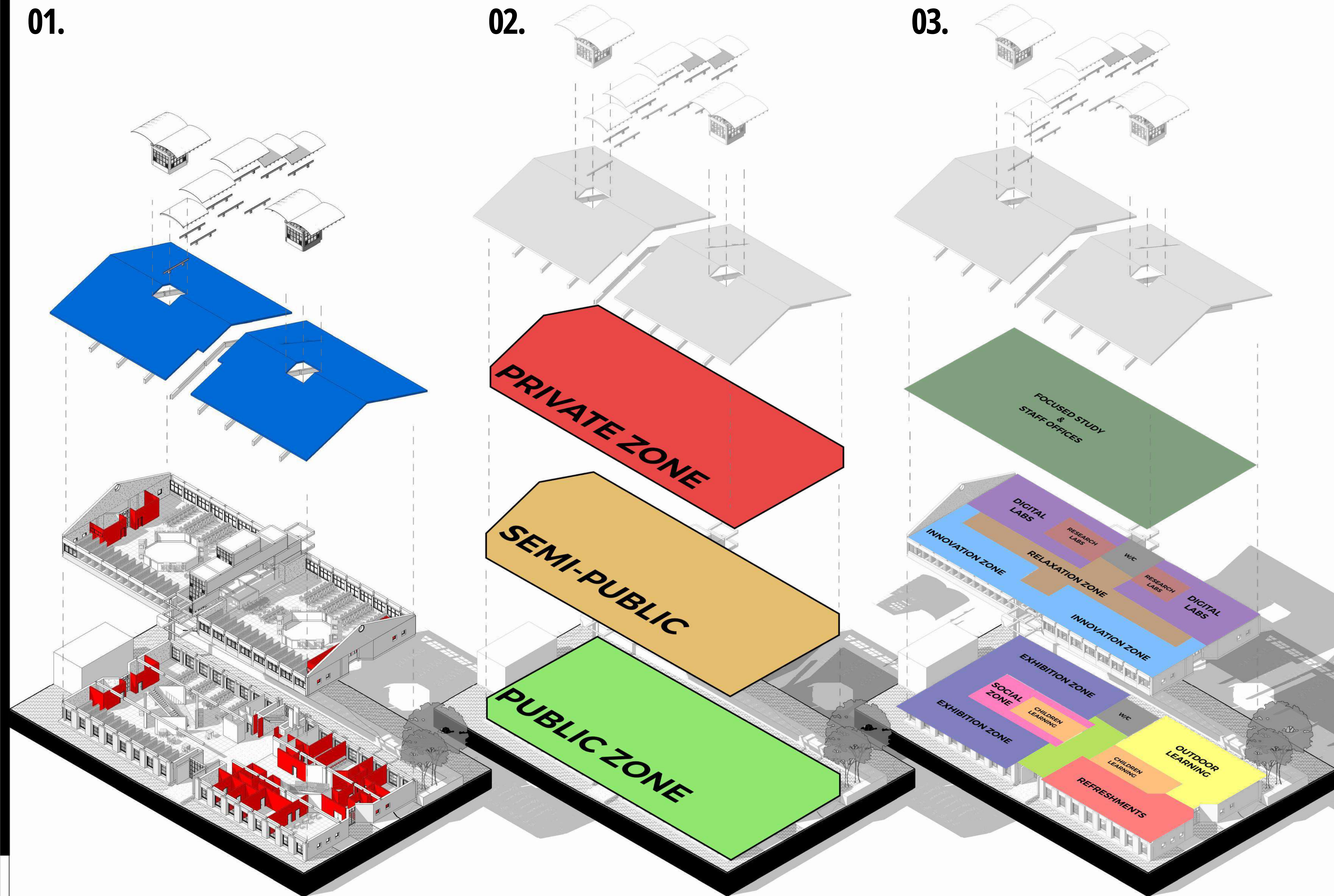
SEMI PUBLIC ZONE

PRIVATE ZONE

01.

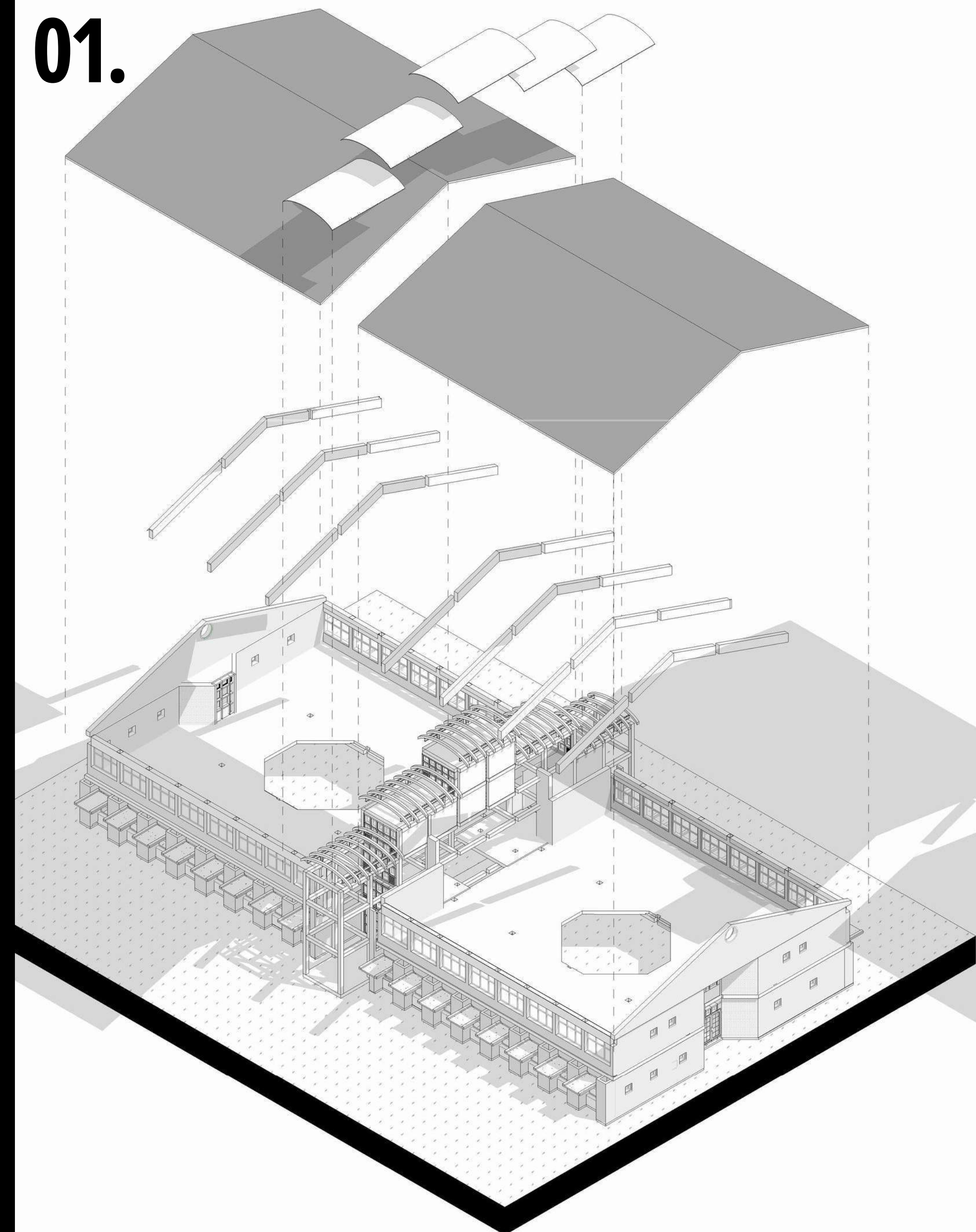
02.

03.

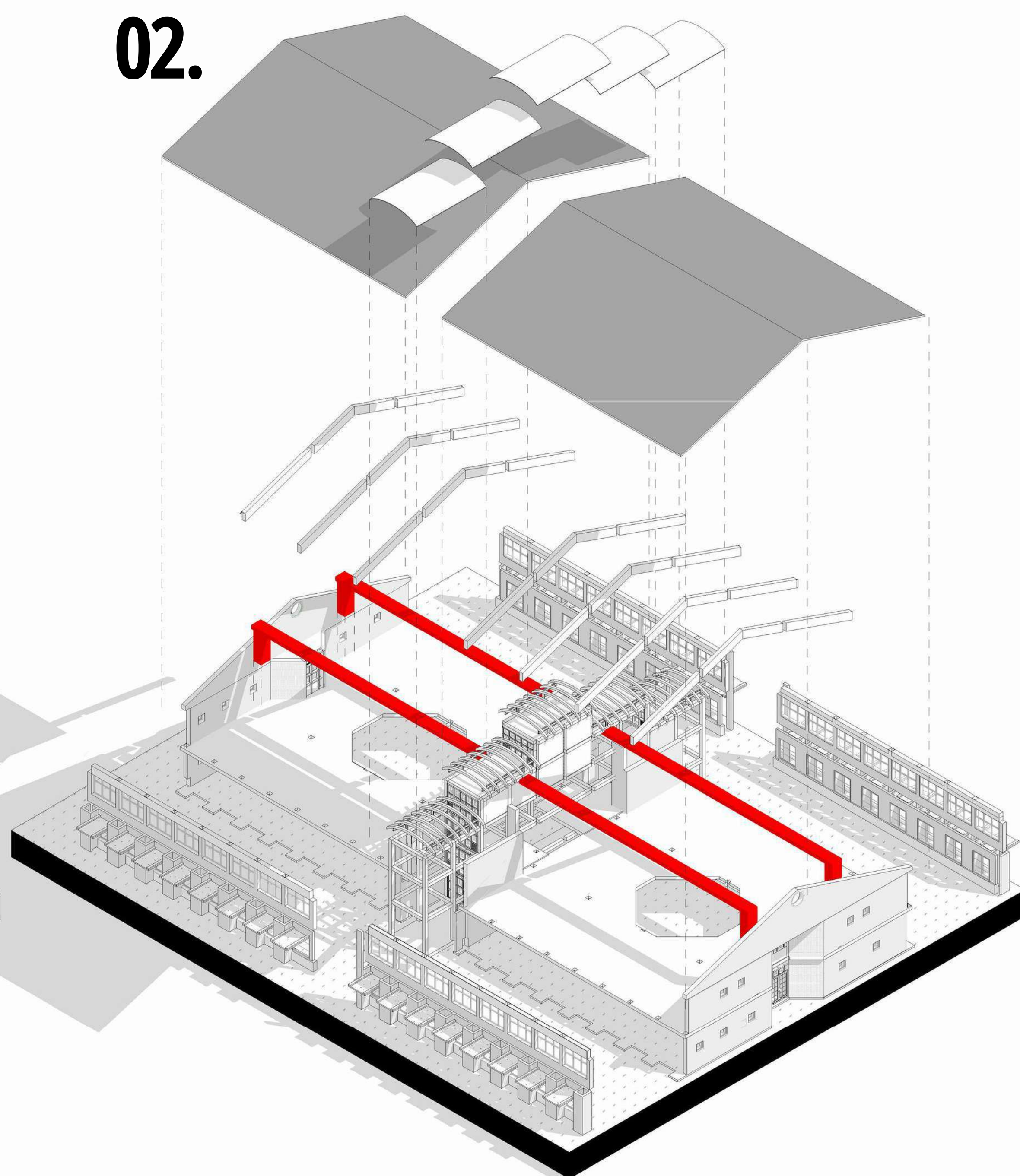


CONCEPT IDEATION

01.



02.



01.

INITIAL CONCEPT
THE FOUNDATIONAL MASSING AND TECTONIC FRAMEWORK FOR THE CONSERVATION LIBRARY INTERVENTION. THIS STAGE ESTABLISHES THE PRIMARY ARCHITECTURAL VOCABULARY THROUGH THE INTRODUCTION OF A FLOATING ROOF PLANE AND SUSPENDED LINEAR LIGHTING/CEILING ELEMENTS. THE BASIC STRUCTURAL SKELETON IS DEFINED, CREATING A CLEAR DIALOGUE BETWEEN THE NEW INTERVENTION AND THE EXISTING BUILDING FABRIC. EMPHASIS IS PLACED ON LEGIBILITY OF THE OVERALL VOLUME, PRESERVATION OF NATURAL LIGHT PENETRATION, AND THE ESTABLISHMENT OF A MODULAR RHYTHM THAT RESPECTS THE HERITAGE STRUCTURE WHILE INTRODUCING CONTEMPORARY CLARITY.

02.

STRUCTURAL DEVELOPMENT
REINFORCEMENT AND ARTICULATION OF THE LOAD-BEARING SYSTEM. ADDITIONAL PRIMARY AND SECONDARY STEEL BEAMS AND COLUMNS ARE INTRODUCED TO CREATE A ROBUST ORTHOGONAL GRID THAT ENHANCES STRUCTURAL INTEGRITY AND SPATIAL FLEXIBILITY. THIS PHASE EXPLORES THE INTEGRATION OF NEW STRUCTURAL MEMBERS WITH THE EXISTING LOAD PATHS, ENSURING MINIMAL DISRUPTION TO THE HISTORIC FABRIC. THE DEVELOPMENT OF HORIZONTAL BRACING AND VERTICAL SUPPORTS PROVIDES BOTH LATERAL STABILITY AND A VISUAL FRAMEWORK THAT BEGINS TO DEFINE CIRCULATION AND EXHIBITION ZONES, WHILE MAINTAINING AN OPEN, COLUMN-MINIMAL INTERIOR WHERE POSSIBLE.

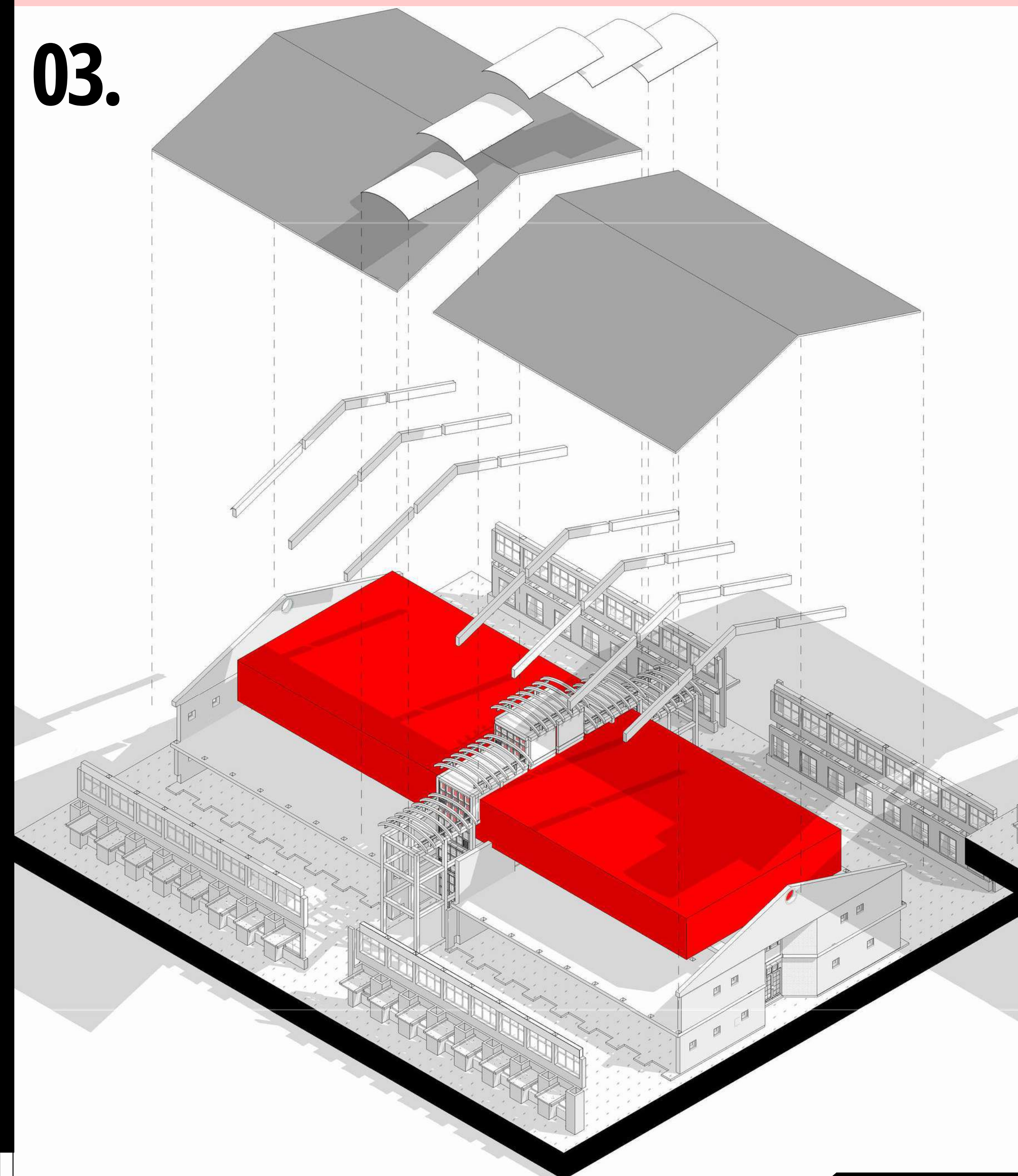
03.

PROGRAM & SPATIAL MASSING
STRATEGIC INSERTION OF PROGRAMMED VOLUMES AND FUNCTIONAL ZONING. MAJOR ACTIVITY AREAS — INCLUDING EXHIBITION SPACES, READING ZONES, AND CONSERVATION WORKSHOPS — ARE DEFINED THROUGH SOLID MASSING (HIGHLIGHTED IN RED). THIS STAGE INVESTIGATES THE CREATION OF SPATIAL HIERARCHY THROUGH DOUBLE-HEIGHT VOLUMES, VISUAL TRANSPARENCY, AND CONTROLLED SECTIONAL RELATIONSHIPS. THE DESIGN EXPLORES THE BALANCE BETWEEN SOLID AND VOID, ENABLING BOTH FUNCTIONAL EFFICIENCY AND EXPERIENTIAL RICHNESS. SPECIAL ATTENTION IS GIVEN TO THE FLOW OF MOVEMENT, NATURAL DAYLIGHT DISTRIBUTION, AND THE ACOUSTIC AND ENVIRONMENTAL PERFORMANCE OF THE NEW INSERTIONS WITHIN THE CONSERVED ENVELOPE.

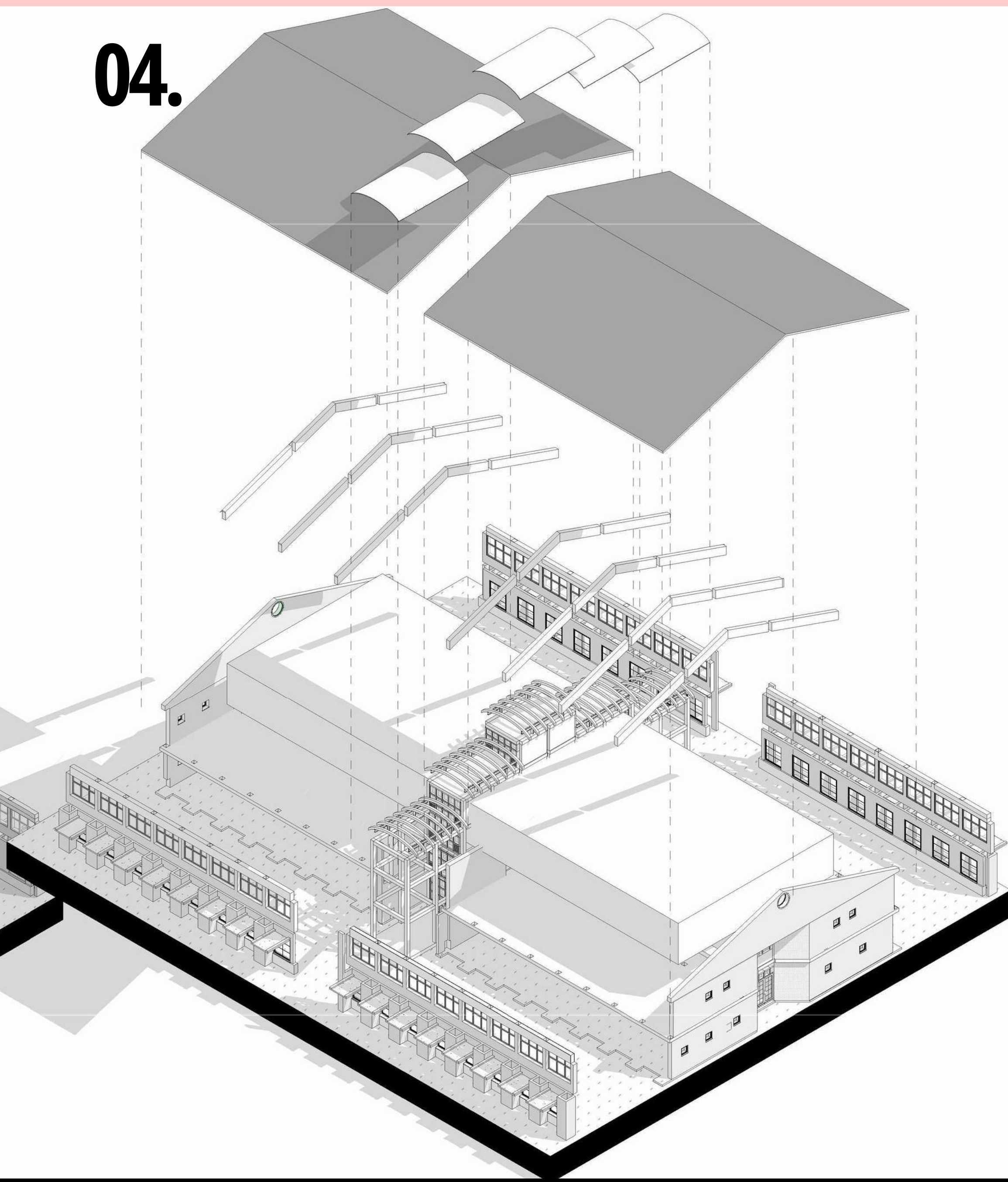
04.

INTEGRATION & REFINEMENT
SYNTHESIS AND FINAL RESOLUTION OF THE ARCHITECTURAL PROPOSAL. THIS CULMINATING STAGE REFINES THE RELATIONSHIP BETWEEN STRUCTURE, PROGRAM, AND ENVELOPE, ACHIEVING A COHESIVE TECTONIC EXPRESSION. FURTHER DEVELOPMENT OF THE ROOF GEOMETRY, SUSPENDED ELEMENTS, AND INTERSTITIAL SPACES STRENGTHENS THE CONNECTION BETWEEN OLD AND NEW. THE DESIGN NOW FULLY INTEGRATES TECHNICAL REQUIREMENTS SUCH AS STRUCTURAL PERFORMANCE, SERVICES DISTRIBUTION, AND HERITAGE-SENSITIVE DETAILING, RESULTING IN A LAYERED, CONTEMPORARY INTERVENTION THAT ENHANCES THE FUNCTIONALITY OF THE JKUAT LIBRARY WHILE RESPECTING ITS CONSERVATION VALUES.

03.

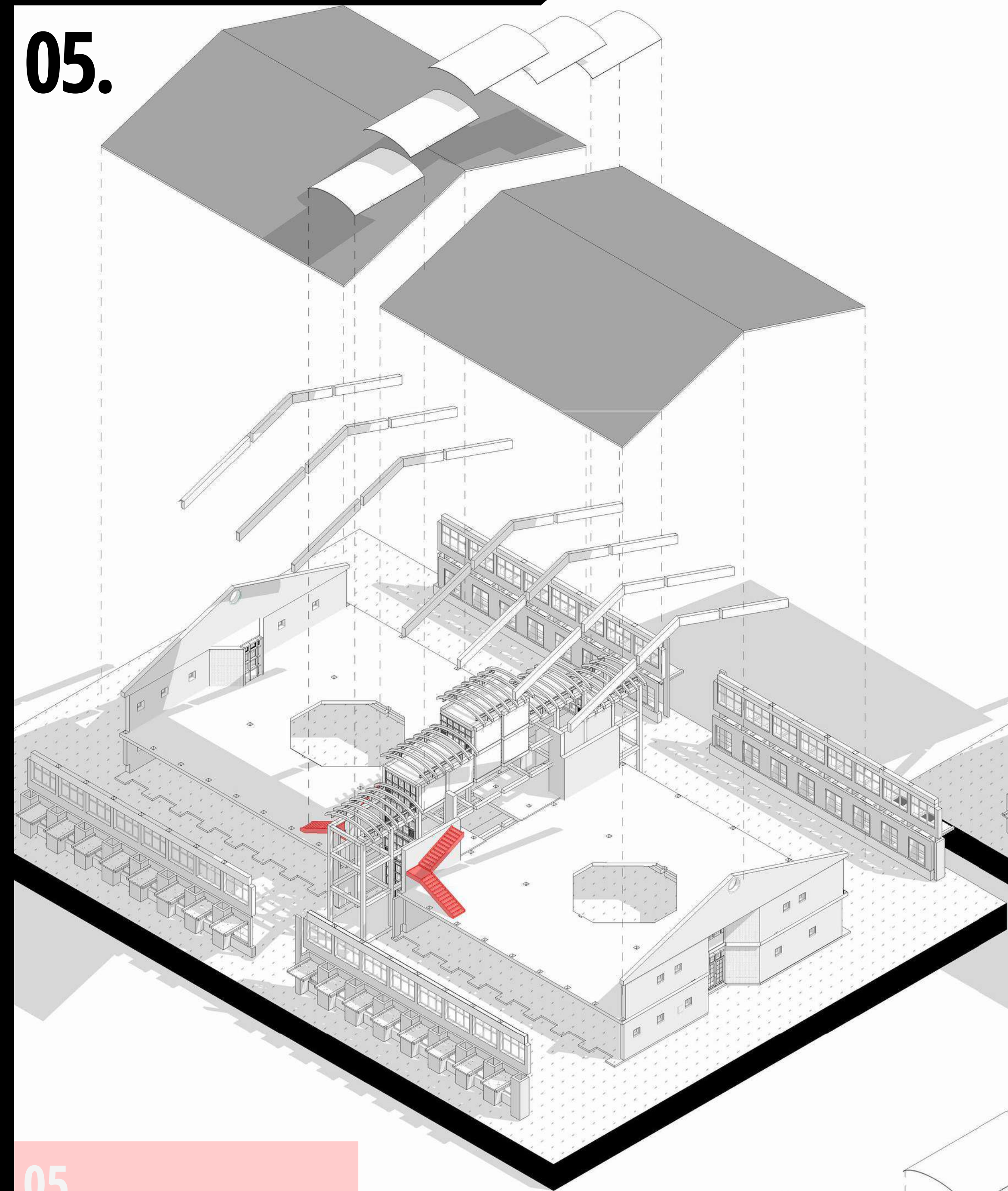


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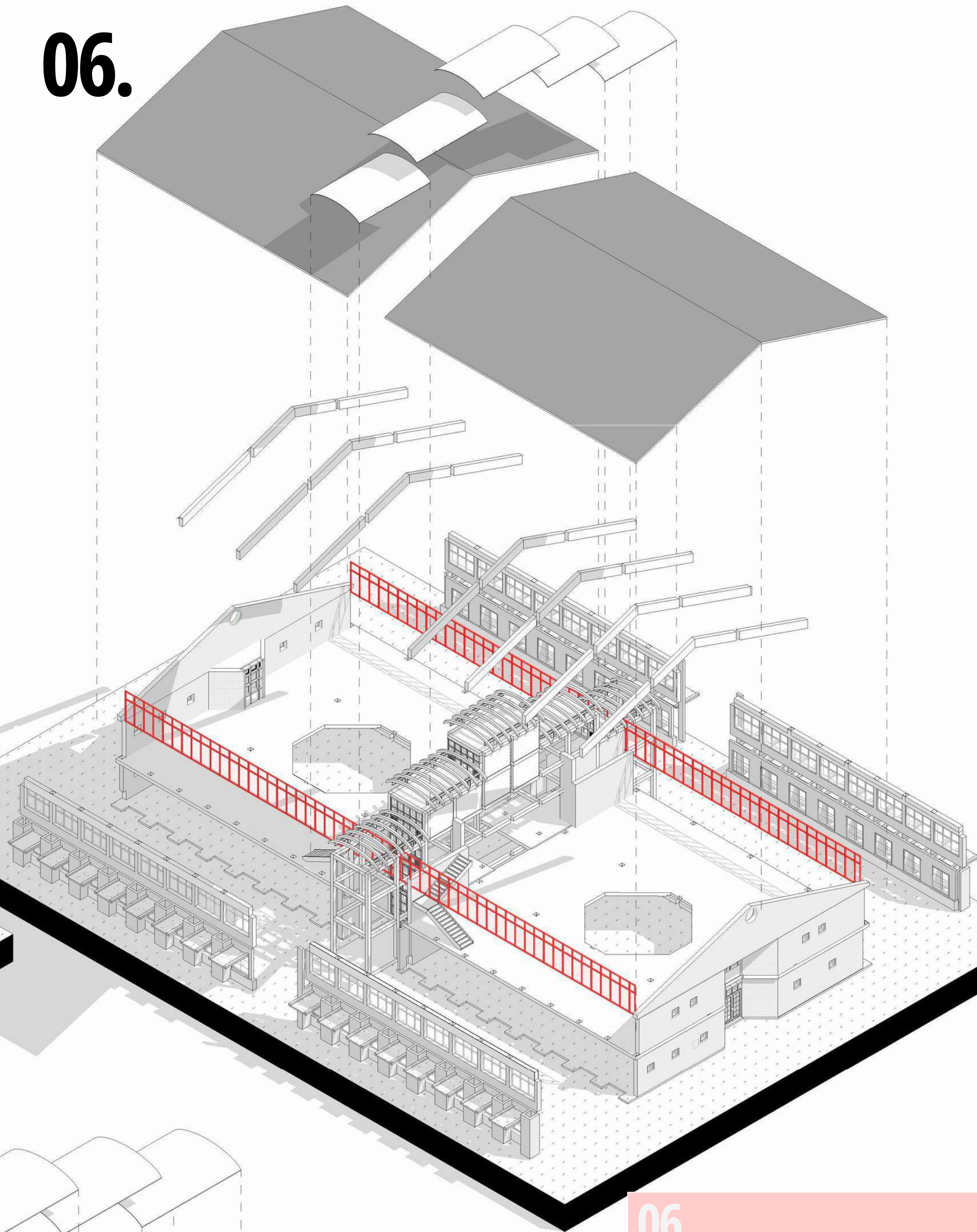


CONCEPT IDEATION

05.



06.



05.

VERTICAL CIRCULATION & MEZZANINE DEVELOPMENT
INTRODUCTION OF THE PRIMARY VERTICAL CIRCULATION SYSTEM TO ACTIVATE THE UPPER LEVEL. A STRATEGICALLY LOCATED STAIRCASE IS INSERTED TO PROVIDE SEAMLESS ACCESS TO THE PROPOSED MEZZANINE FLOOR, ENHANCING SPATIAL CONNECTIVITY BETWEEN THE GROUND AND UPPER LEVELS. THIS INTERVENTION MARKS A CRITICAL SHIFT FROM PURELY HORIZONTAL PLANNING TO A SECTIONAL STRATEGY, ALLOWING FOR THE CREATION OF LAYERED SPATIAL EXPERIENCES. THE STAIRCASE IS POSITIONED TO MINIMIZE DISRUPTION TO THE MAIN READING AND EXHIBITION AREAS WHILE OPTIMIZING CIRCULATION FLOW AND WAYFINDING WITHIN THE CONSERVED LIBRARY STRUCTURE.

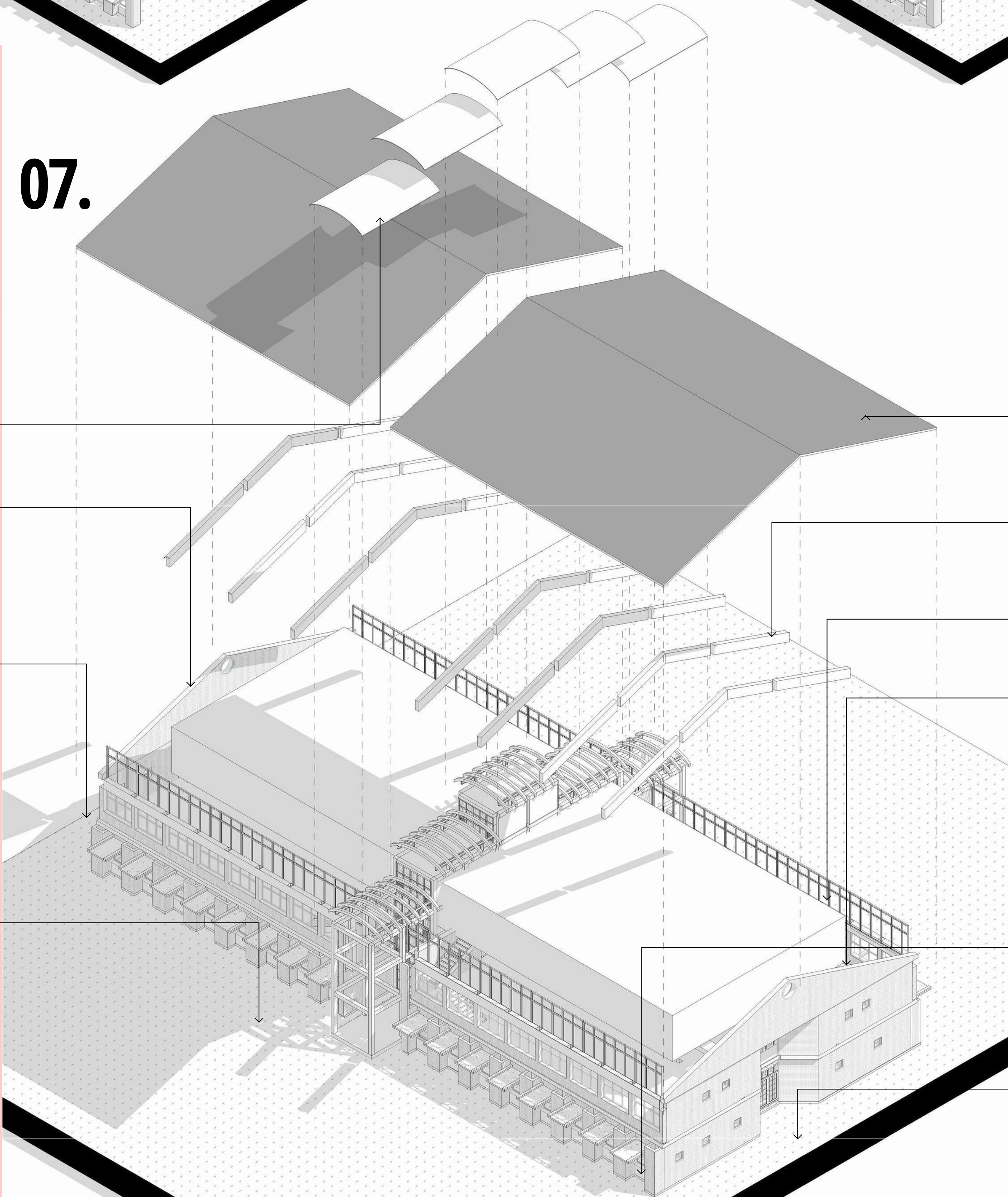
CURVED BARREL VAULT SKYLIGHT ALL JOINTS WEATHER-SEALED WITH EPDM GASKETS AND ARCHITECTURAL SILICONE

200MM THICK MASONRY WALL, PLASTERED AND PAINTED INTERNALLY TO APPROVAL

AICAD GYM

STUDENTS WALKWAY

07.



06.

ROOF ARTICULATION & ENVIRONMENTAL OPTIMIZATION
RESOLUTION OF SECTIONAL CONSTRAINTS THROUGH THE INTRODUCTION OF A MANSARD-STYLE ROOF FORM. THIS MODIFICATION ACHIEVES ADEQUATE HEADROOM AND VOLUME AT THE MEZZANINE LEVEL WITHOUT COMPROMISING THE OVERALL BUILDING SCALE OR HERITAGE ENVELOPE. CONCURRENTLY, A SELECTIVE CUTTING WALL SYSTEM IS INTRODUCED ON THE NON-SOUTH FAÇADE, CREATING CONTROLLED APERTURES THAT HARVEST DIFFUSED NATURAL DAYLIGHT. THIS TECTONIC MOVE SIGNIFICANTLY REDUCES RELIANCE ON ARTIFICIAL LIGHTING, IMPROVES ENERGY EFFICIENCY, AND GENERATES A DYNAMIC PLAY OF LIGHT AND SHADOW THROUGHOUT THE DAY. THE MANSARD ROOF FURTHER ENRICHES THE ARCHITECTURAL LANGUAGE BY ESTABLISHING A DISTINCTIVE FIFTH ELEVATION WHILE MAINTAINING VISUAL HARMONY WITH THE EXISTING CONSERVATION LIBRARY.

PITCHED GABLE ROOF AT 18 SLOPE COMPRISING PRE-FABRICATED LIGHT GAUGE STEEL (LGS) TRUSSES AT 1200MM C/C. FIXED ON 75X50X2MM STEEL PURLINS.

TIMBER RAFTERS

CURTAIN WALL TO SCHEDU

500X 500MM CERAMIC TILES FLOOR FINISH LAID ON 25MM THICK MORTAR, LAID ON 50MM CONCRETE TOPPING LAID ON 200MM THICK HOLLOW POT FLOOR SLAB TO S.E. DETAILS

NATURAL STONE AGGREGATE

PARKING AREA

SYNTHESIS & FINAL INTEGRATION
CULMINATION OF THE ITERATIVE DESIGN PROCESS — THE HOLISTIC CONVERGENCE OF ALL PREVIOUS EXPLORATIONS. THIS STAGE SYNTHESIZES THE STRUCTURAL GRID, PROGRAMMED VOLUMES, VERTICAL CIRCULATION, ROOF GEOMETRY, AND ENVIRONMENTAL SYSTEMS INTO A UNIFIED ARCHITECTURAL PROPOSAL. THE FINAL CONFIGURATION DEMONSTRATES A REFINED DIALOGUE BETWEEN OLD AND NEW:

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CONSERVATION - JKUAT LIBRARY

REMOVAL V RETAINING STRATEGY

PLANNING STRATEGY

DESIGN PHILOSOPHY ECO-CENTRIC DESIGN

Retaining the brick skin and concrete frame minimizes waste and embodied carbon, while removing failed glazing systems restores the building's original passive climatic performance.



METHODS OF CONSERVATION ADAPTIVE RE-USE

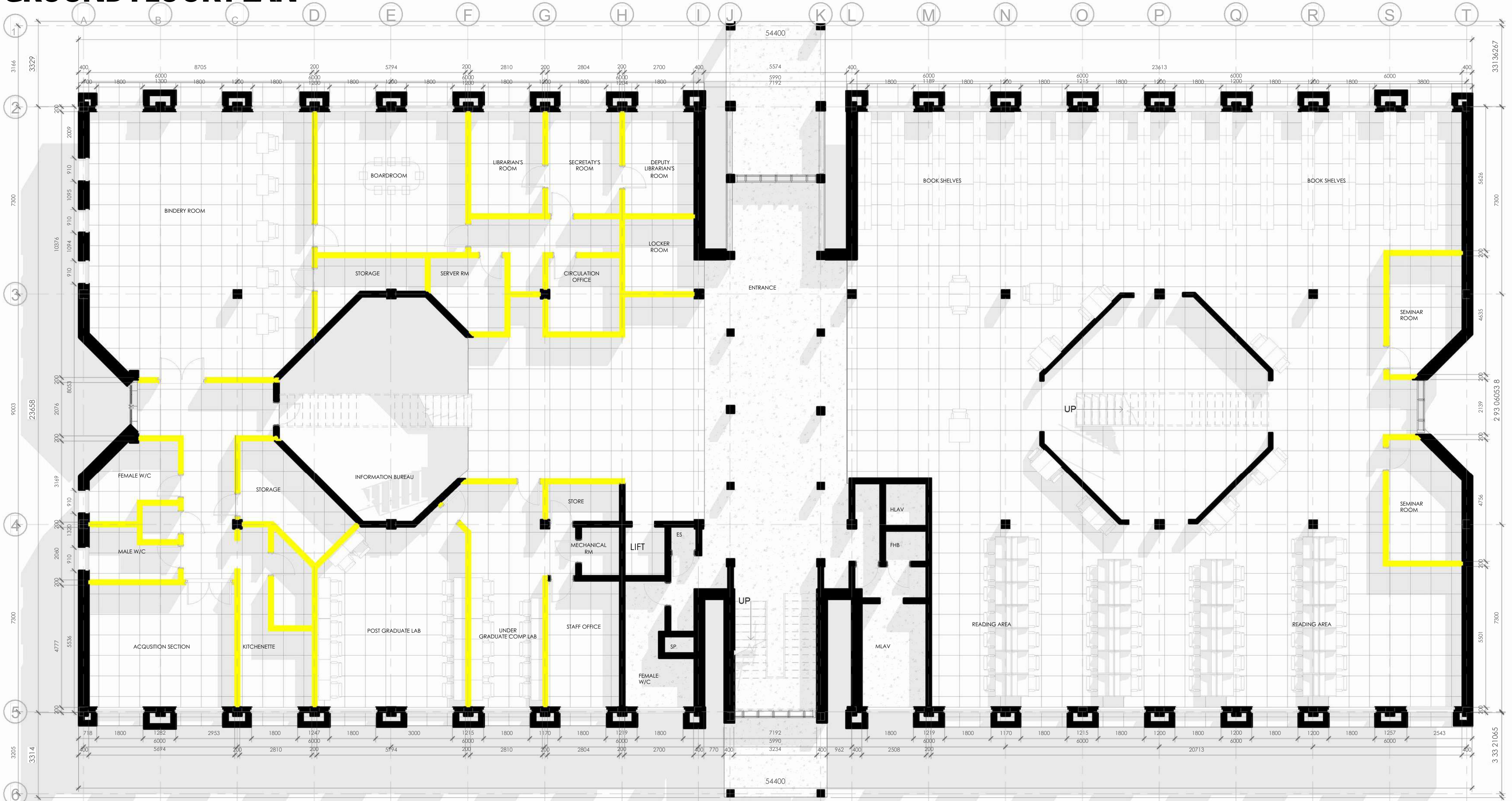
Retaining the primary structural grid allows for internal spatial reconfiguration, while removing obsolete partitions and failed glazing facilitates modern technological and functional building upgrades.



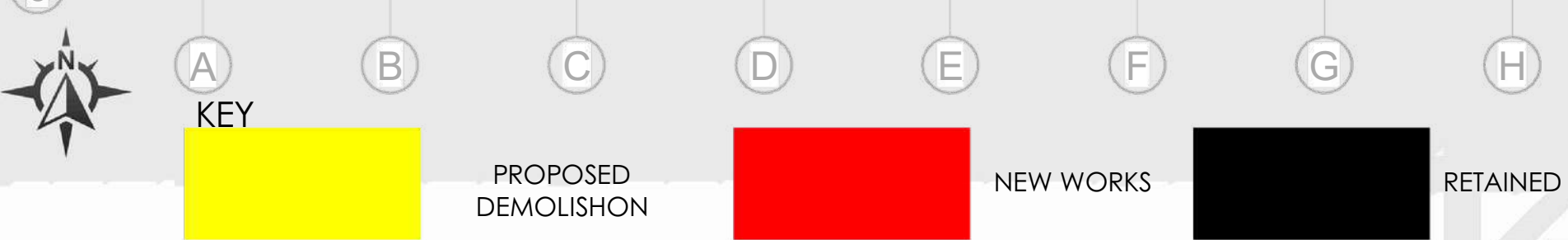
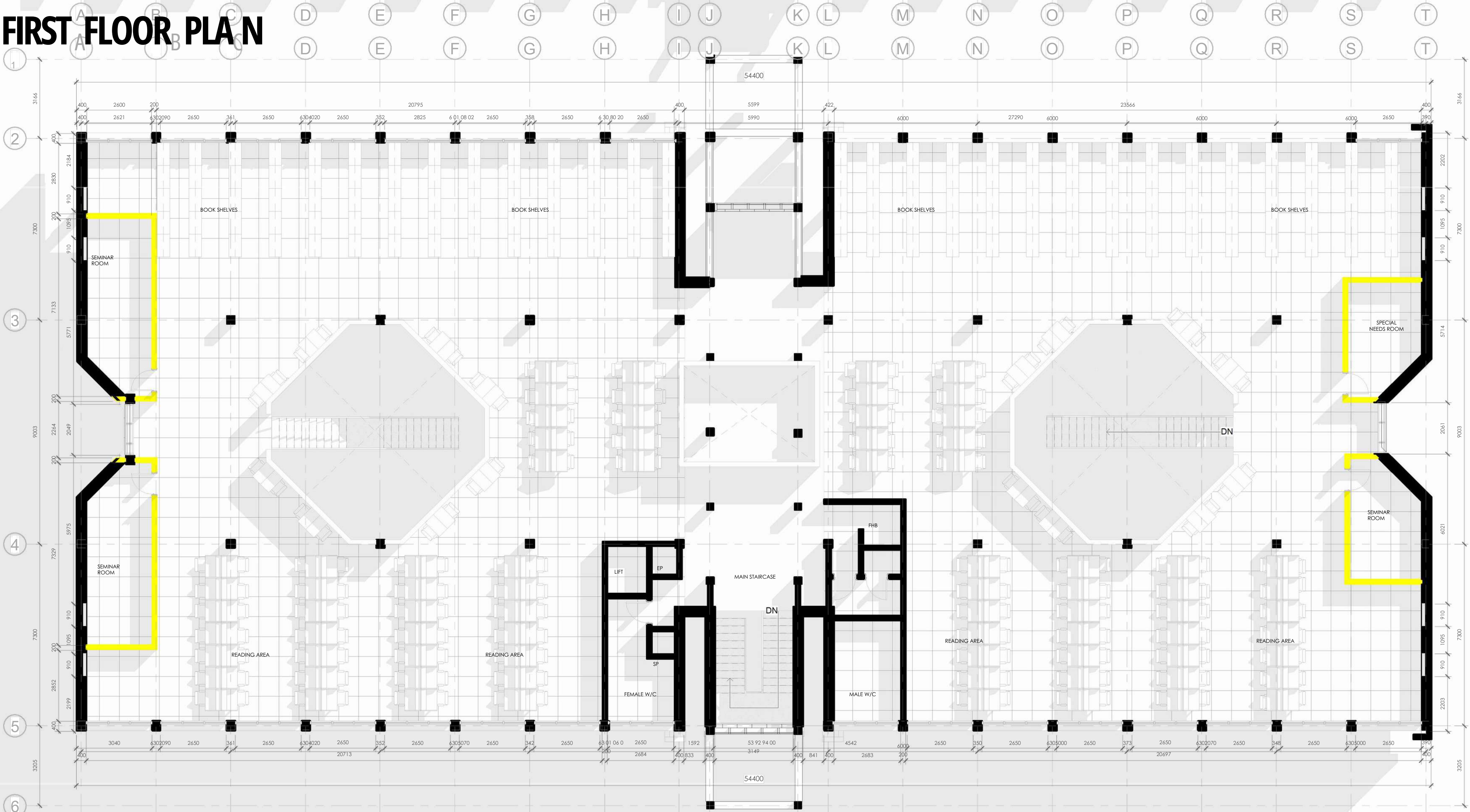
PRINCIPLES OF INTERVENTION AUTHENTICITY & INTEGRITY

Retaining original masonry and structural concrete preserves the library's material integrity and character, while removing non-original additions restores the building's authentic Brutalist-Modernist aesthetic and functional clarity.

GROUND FLOOR PLAN

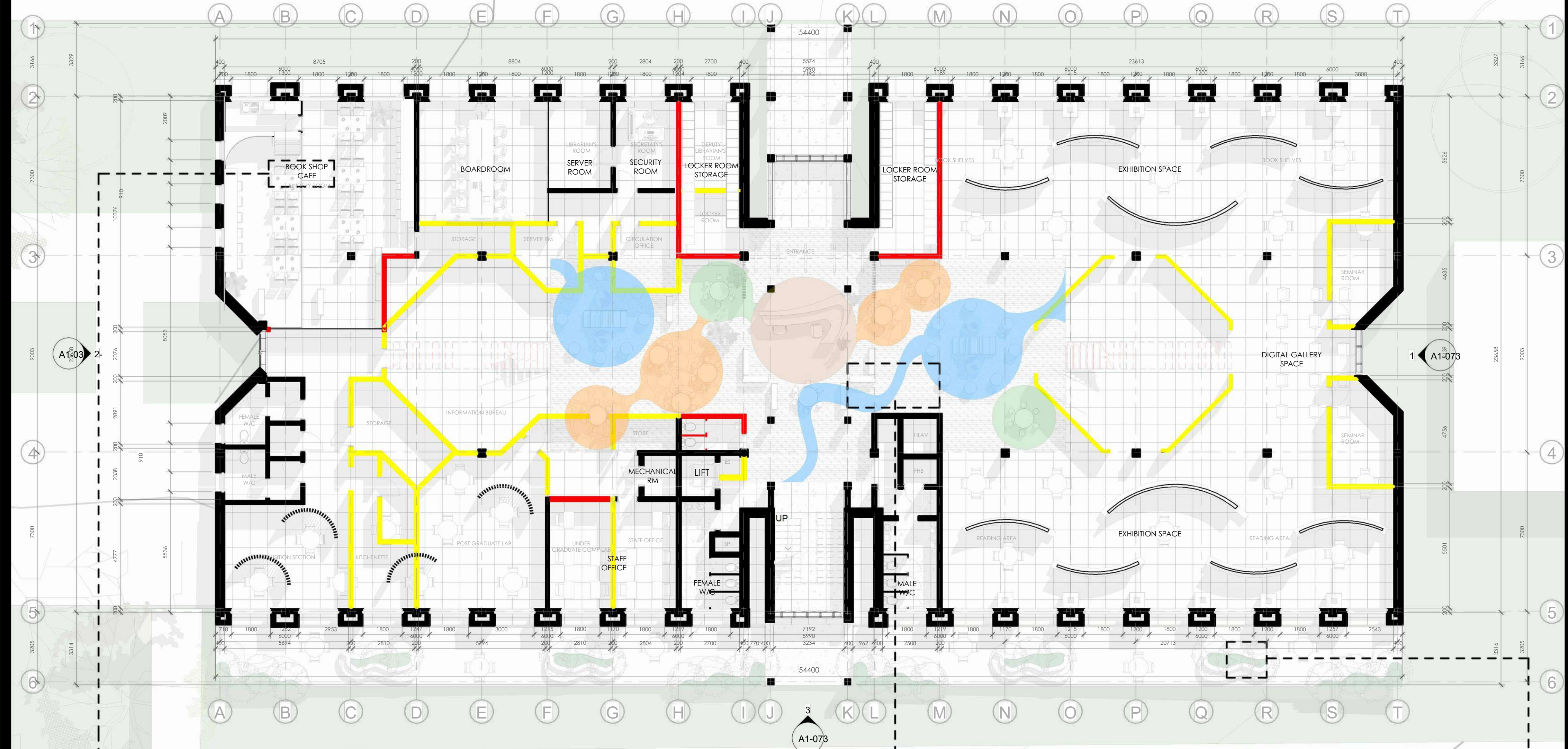


FIRST FLOOR PLAN



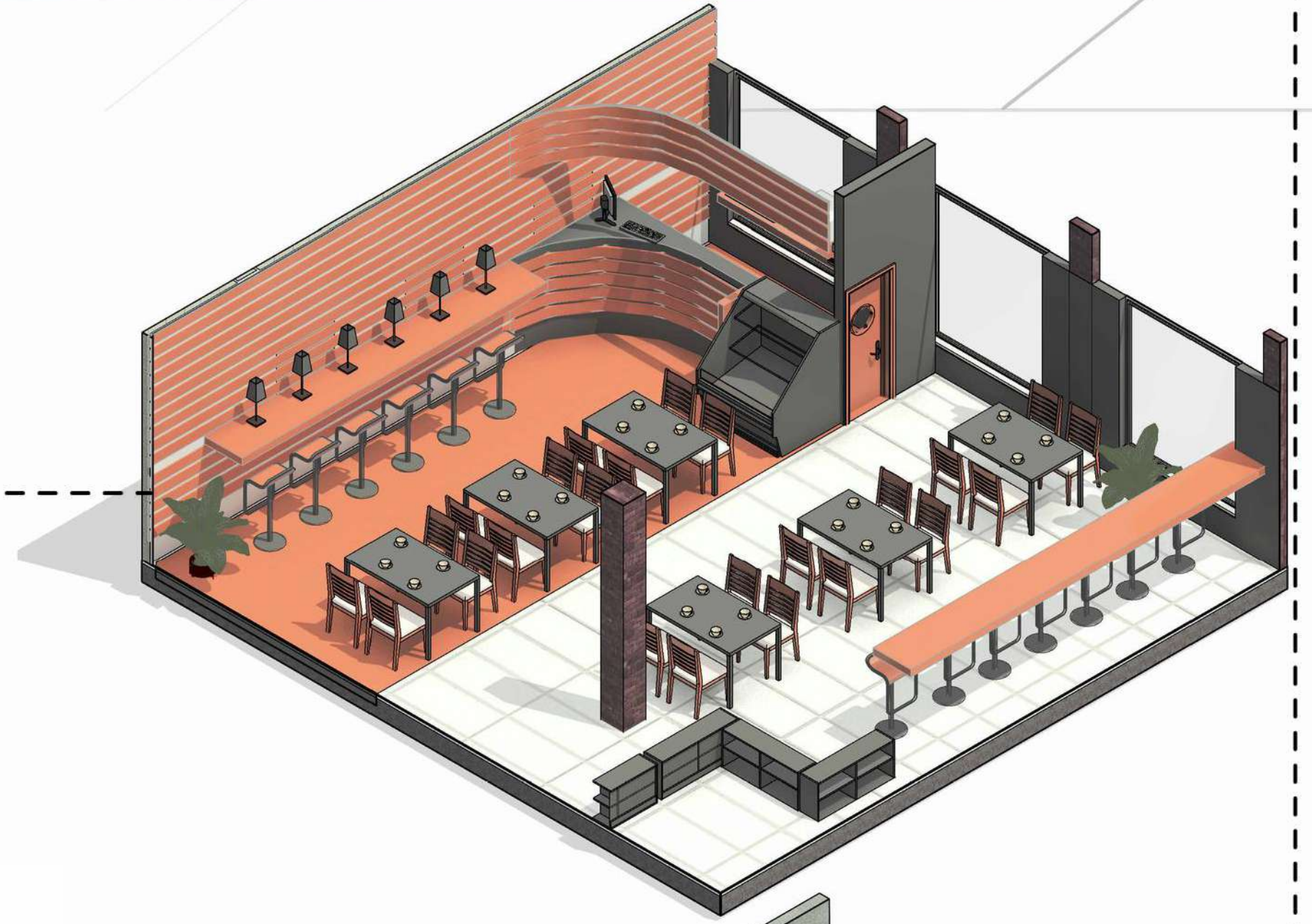
OUTLINE DESIGN

GROUND FLOOR PLAN



BOOKSHOP CAFE

NEW COMMERCIAL + SOCIAL SPACE COMBINING A BOOKSHOP AND CAFÉ. FEATURES COZY SEATING, LONG COMMUNAL TABLES, AND A CURVED SERVICE COUNTER. DESIGNED FOR RELAXED READING, STUDYING WHILE HAVING COFFEE/SNACKS, AND CASUAL BROWSING/BUYING OF BOOKS. LIKELY AIMED AT CREATING A VIBRANT, WELCOMING "THIRD PLACE" IN THE LIBRARY.



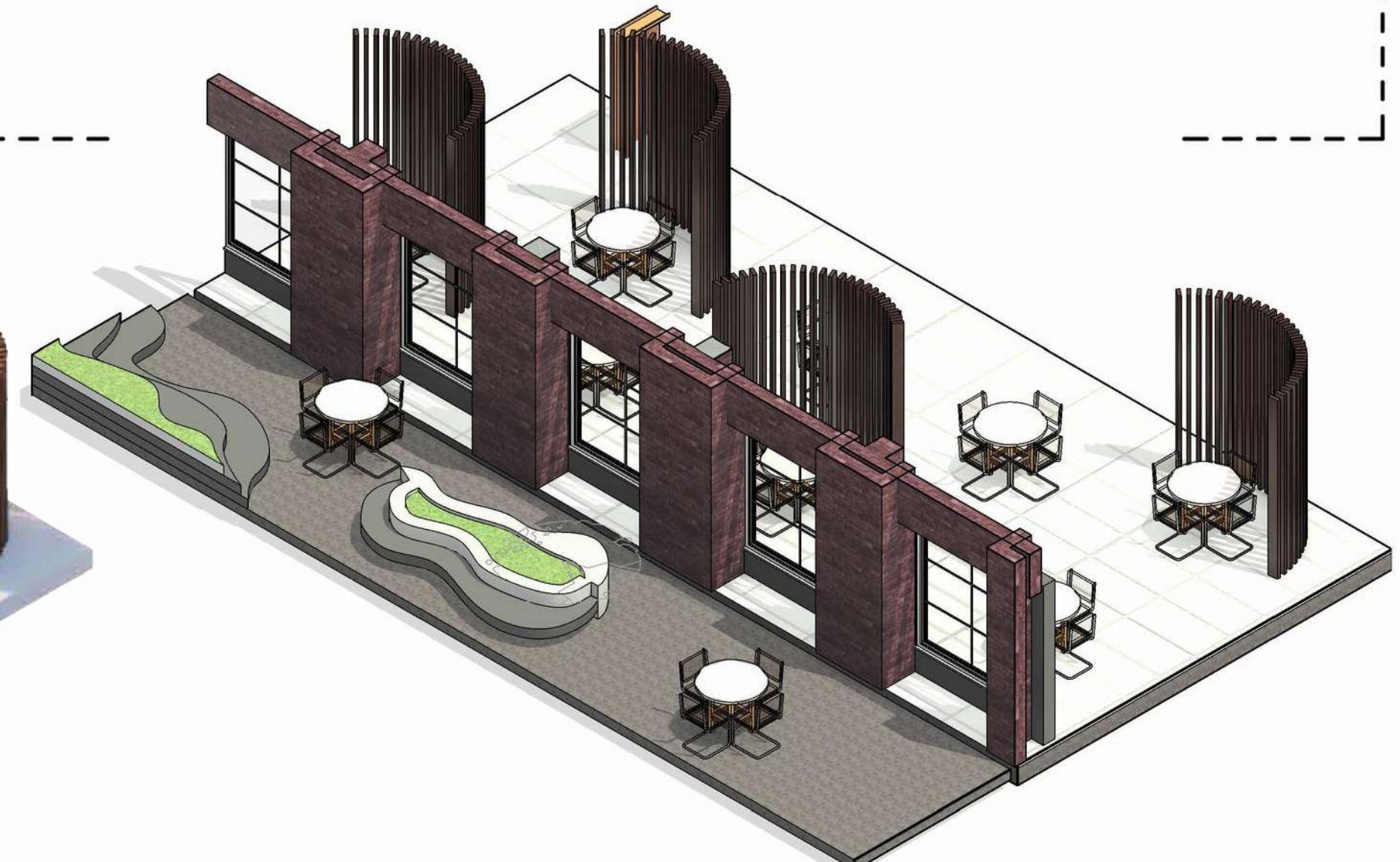
RECEPTION/KIDS LIBRARY

COMBINED RECEPTION AREA AND DEDICATED CHILDREN'S LIBRARY SECTION. BRIGHT, PLAYFUL LAYOUT WITH LOW SEATING, BOOKSHELVES, AND OPEN PLAY/READING ZONES. INCLUDES COLORFUL FLOORING (POSSIBLY WITH A RIVER/STREAM DESIGN ELEMENT FOR FUN). SERVES AS THE WELCOMING FRONT DESK WHILE PROVIDING AN ENGAGING SPACE FOR YOUNG CHILDREN AND FAMILIES.



OUTDOOR/INDOOR LEARNING

FLEXIBLE HYBRID LEARNING SPACES THAT BLEND INDOOR AND OUTDOOR AREAS. FEATURES MODERN PAVILION-STYLE STRUCTURES WITH LARGE OPENINGS/WINDOWS FOR NATURAL LIGHT AND VENTILATION. INCLUDES OUTDOOR SEATING ZONES WITH GREENERY AND SHADED AREAS. DESIGNED FOR GROUP DISCUSSIONS, INFORMAL LEARNING, WORKSHOPS, OR QUIET STUDY WITH A CONNECTION TO NATURE. THE INDOOR VERSION SHOWS ENCLOSED FLEXIBLE ROOMS WITH MOVABLE FURNITURE.



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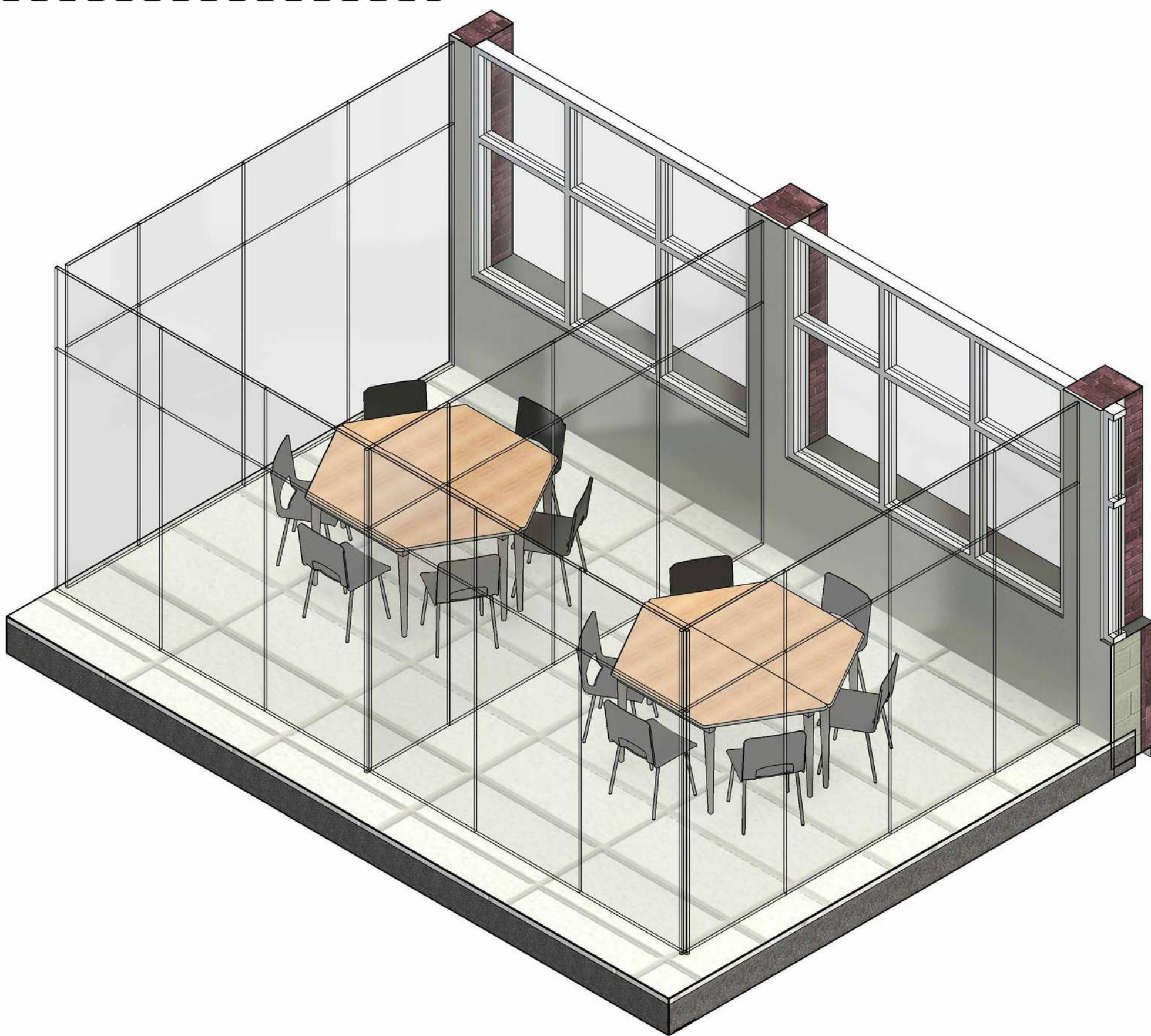
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CONSERVATION - JKUAT LIBRARY

FIRST FLOOR PLAN

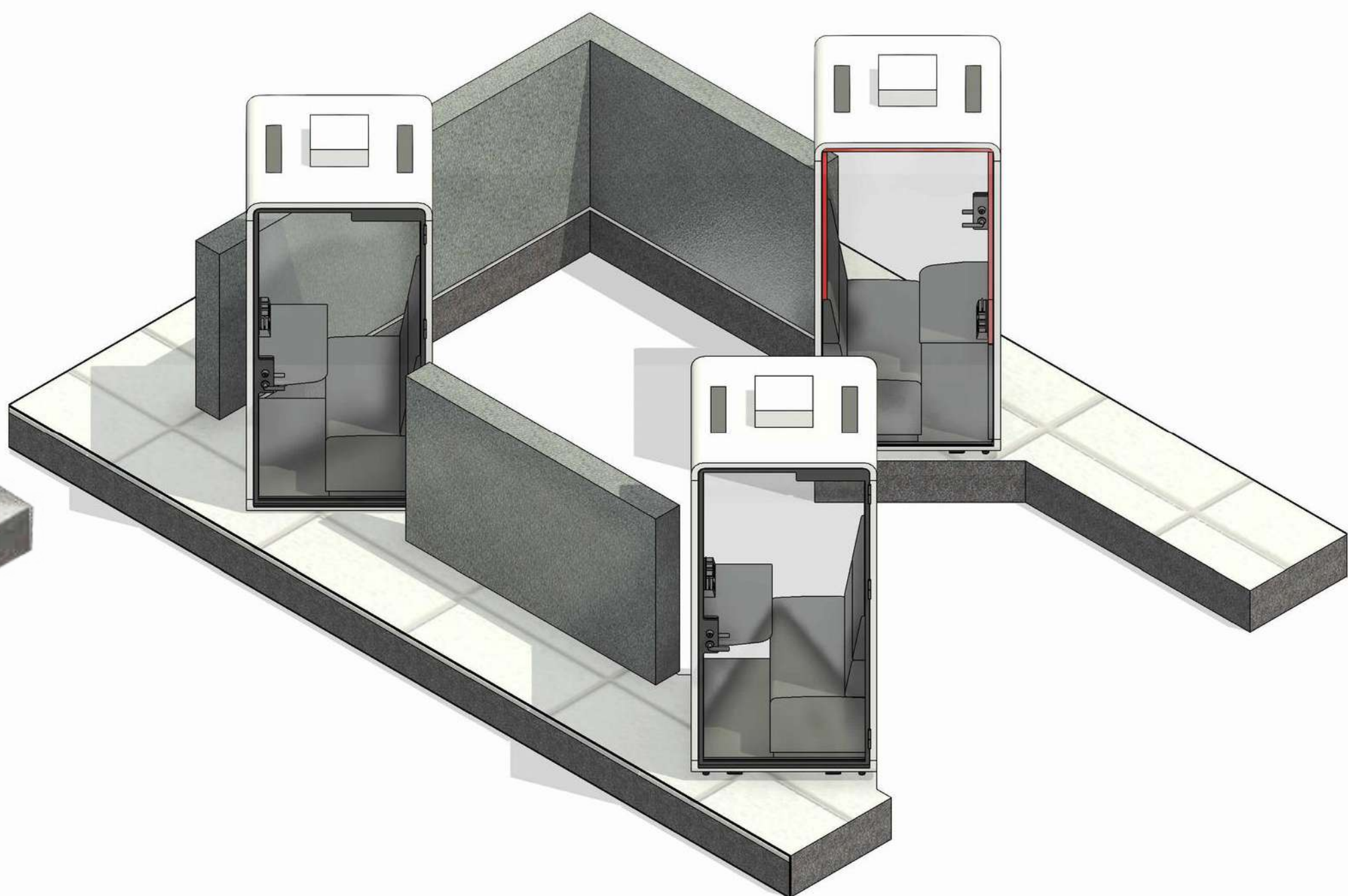


THE PROPOSED MEETING AREA UTILIZES HIGH-TRANSPARENCY GLASS PARTITIONS TO CREATE AN "ACOUSTIC BUBBLE," ALLOWING FOR COLLABORATIVE SOCIAL ZONES WITHOUT OBSTRUCTING THE HISTORIC BUILDING'S SIGHTLINES OR NATURAL LIGHT FLOW. THIS LIGHT-TOUCH, DRY-CONSTRUCTION APPROACH IS IDEAL FOR CONSERVATION, AS IT REMAINS ENTIRELY REVERSIBLE AND MINIMIZES PHYSICAL IMPACT ON THE ORIGINAL LIBRARY SURFACES. TO ENSURE SUCCESS, SPECIFY GLASS WITH A HIGH SOUND TRANSMISSION CLASS (STC) RATING AND INTEGRATE VENTILATION DISCREETLY TO MAINTAIN A COMFORTABLE ENVIRONMENT WITHOUT CLUTTERING THE HERITAGE CEILING.



STUDY PODS

THE MODULAR STUDY PODS INTRODUCE A "POD-IN-POD" LAYOUT THAT PROVIDES STUDENTS WITH INDIVIDUAL AUTONOMY AND A SENSE OF PRIVACY THROUGH STAGGERED, SEMI-ENCLOSED GEOMETRIES. BY HOUSING ALL MODERN ELECTRICAL AND DATA REQUIREMENTS WITHIN THEIR OWN BASE PLATFORMS, THESE PODS ELIMINATE THE NEED FOR INVASIVE FLOOR TRENCING IN THE EXISTING STRUCTURE. THEIR CONTEMPORARY MATERIAL PALETTE CREATES A CLEAR, HONEST DISTINCTION BETWEEN THE NEW 2026 INTERVENTIONS AND THE HISTORIC FABRIC, EFFECTIVELY FACILITATING DEEP WORK WHILE PRESERVING THE LIBRARY'S ARCHITECTURAL INTEGRITY.



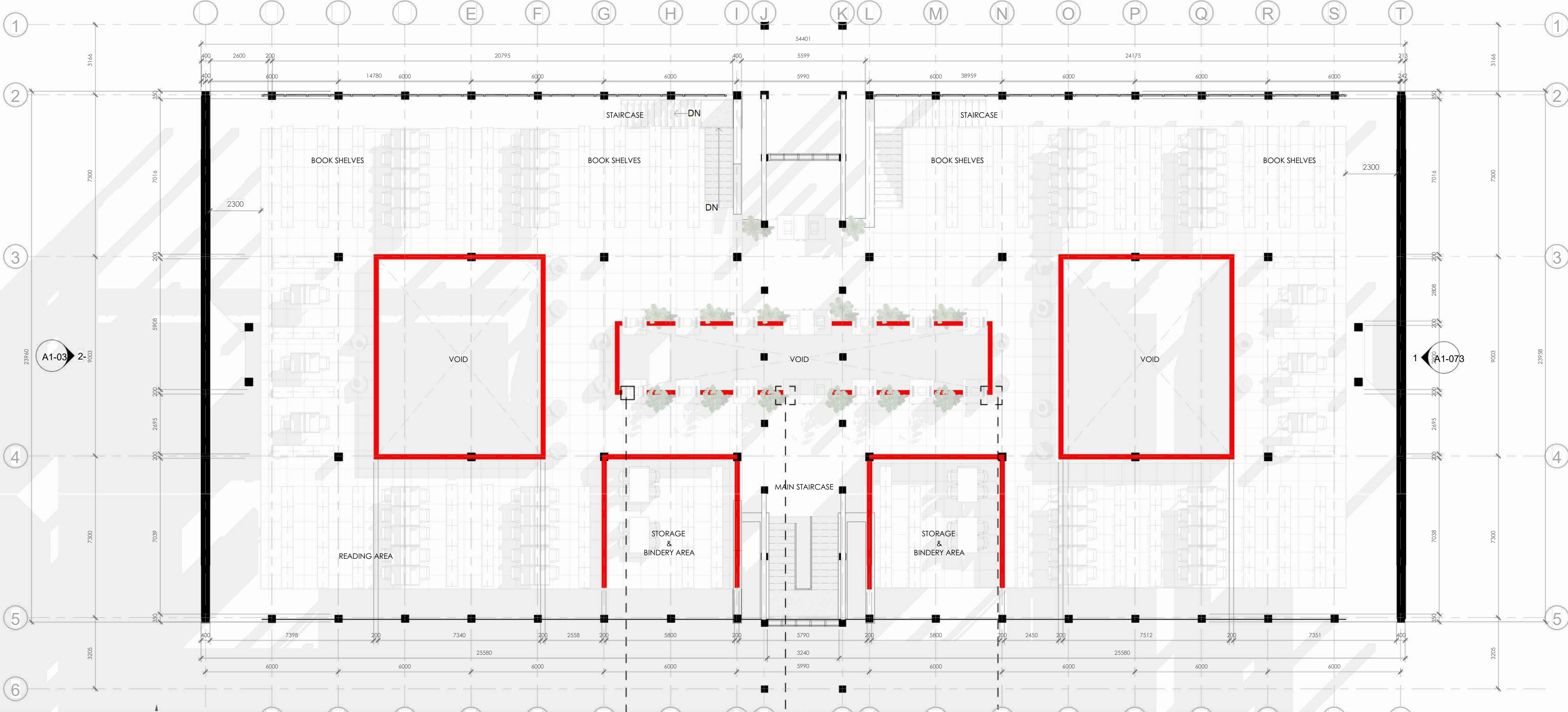
KEY

	PROPOSED DEMOLISHON		NEW WORKS		RETAINED
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OUTLINE DESIGN

AA110-027.2
23

MEZZANINE FLOOR PLAN



FOCUS
POD

COLLABORATION POD

REST
POD



OUTLINE ELEVATIONS

E-01

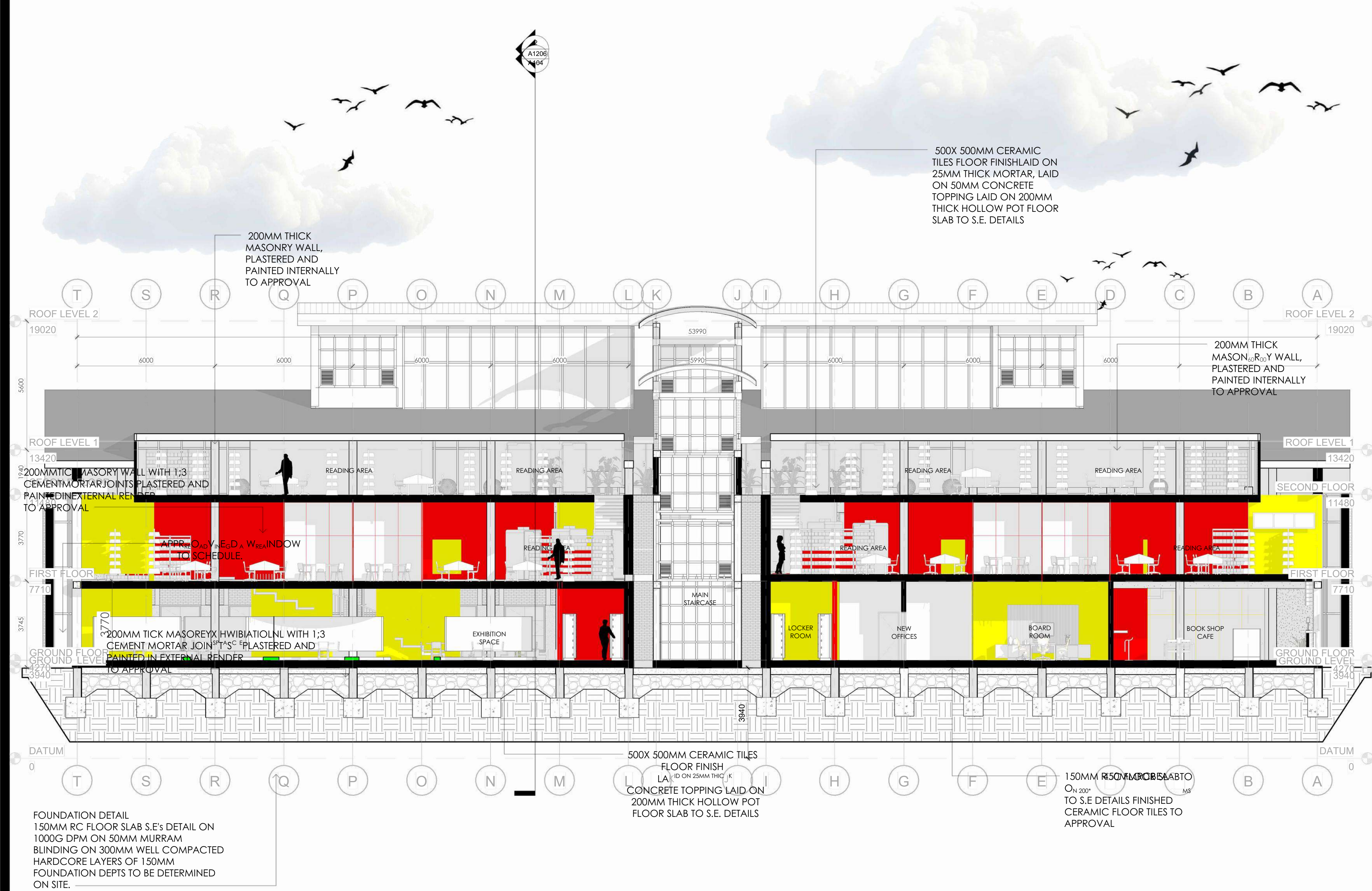


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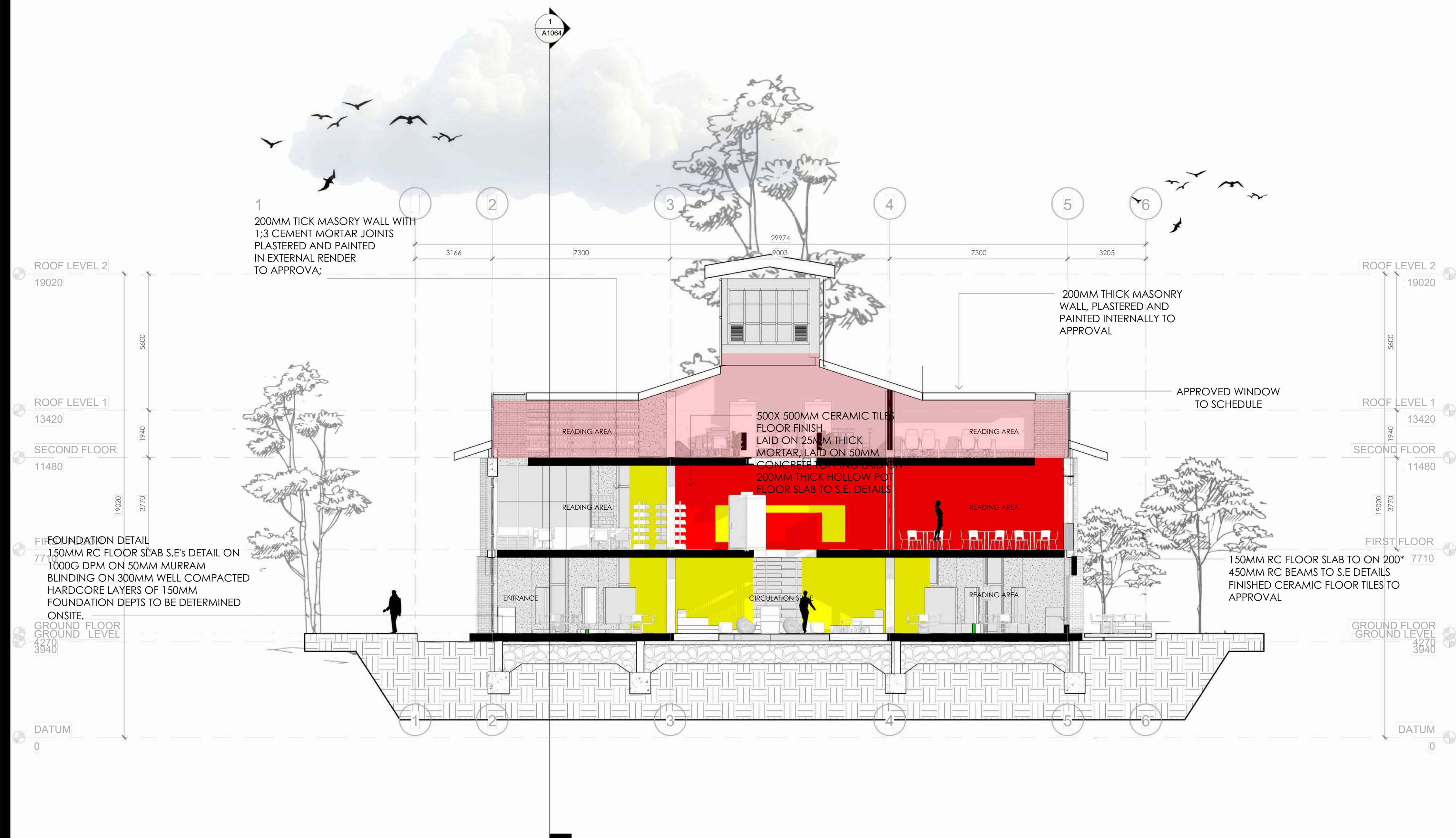
PROPOSED DEMOLITION	NEW WORKS	RETAINED
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OUTLINE SECTIONS

S-01



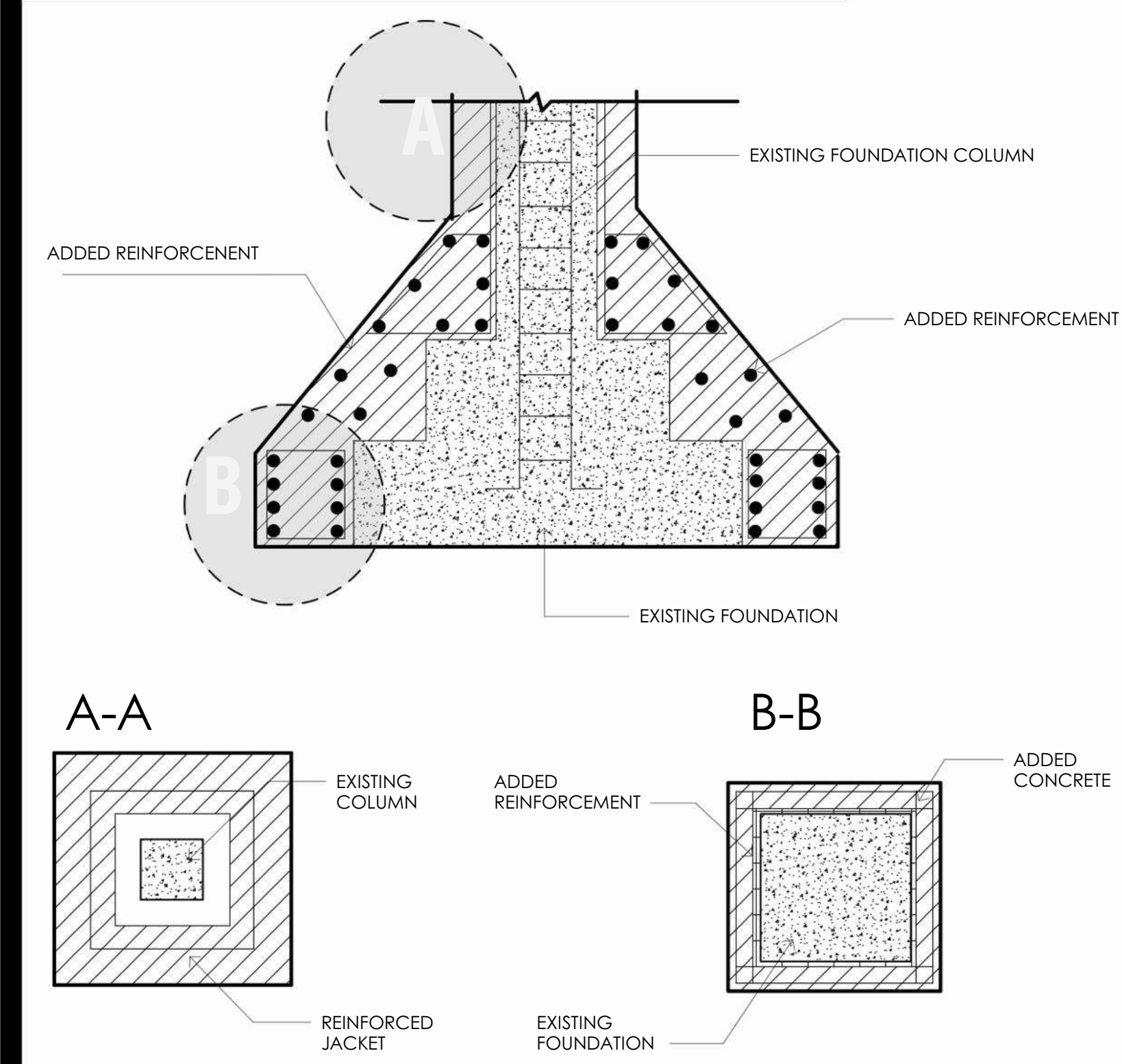
S-02



CONSERVATION - JKUAT LIBRARY

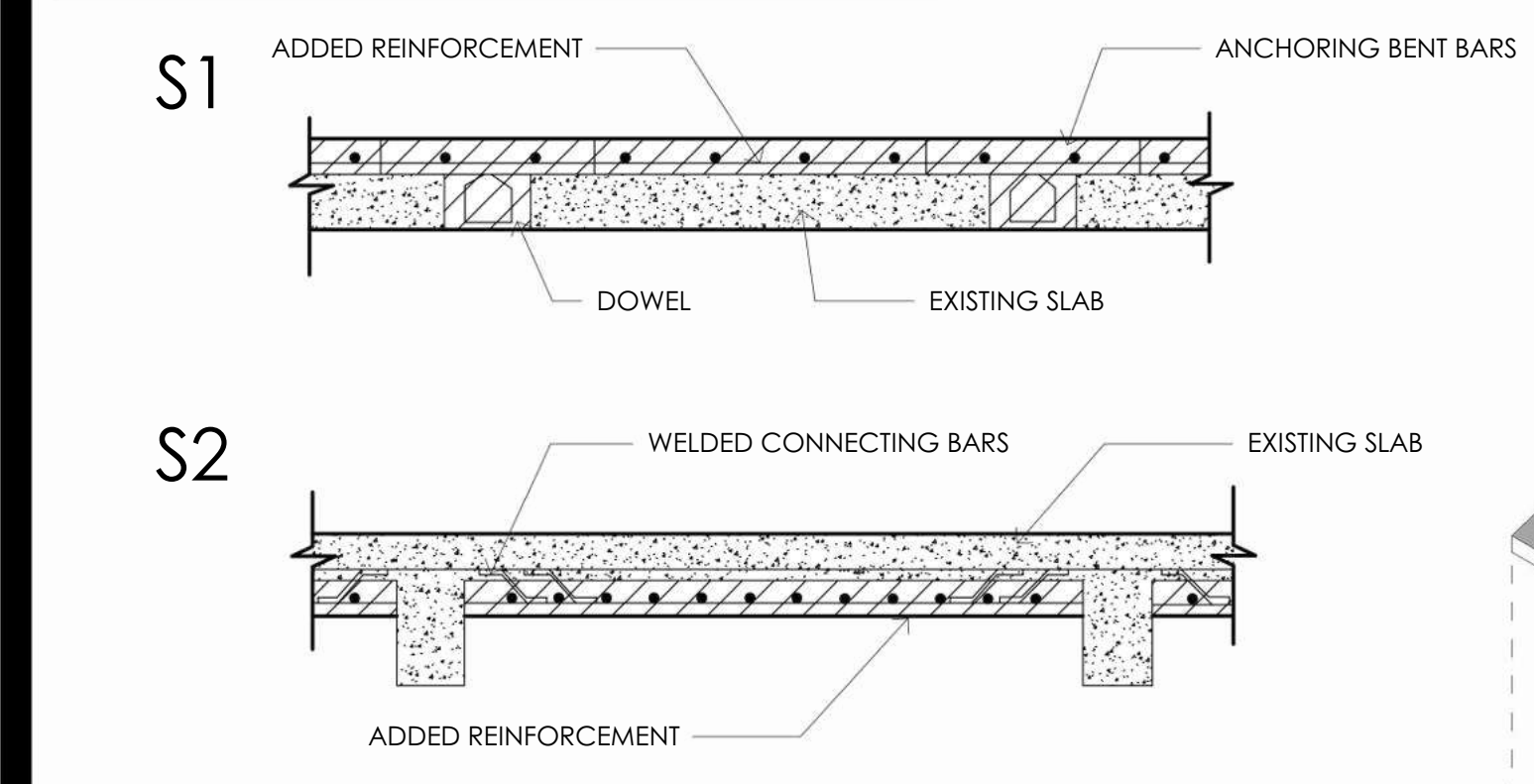
STRUCTURE DETAILS

FOUNDATION RETROFIT DETAIL



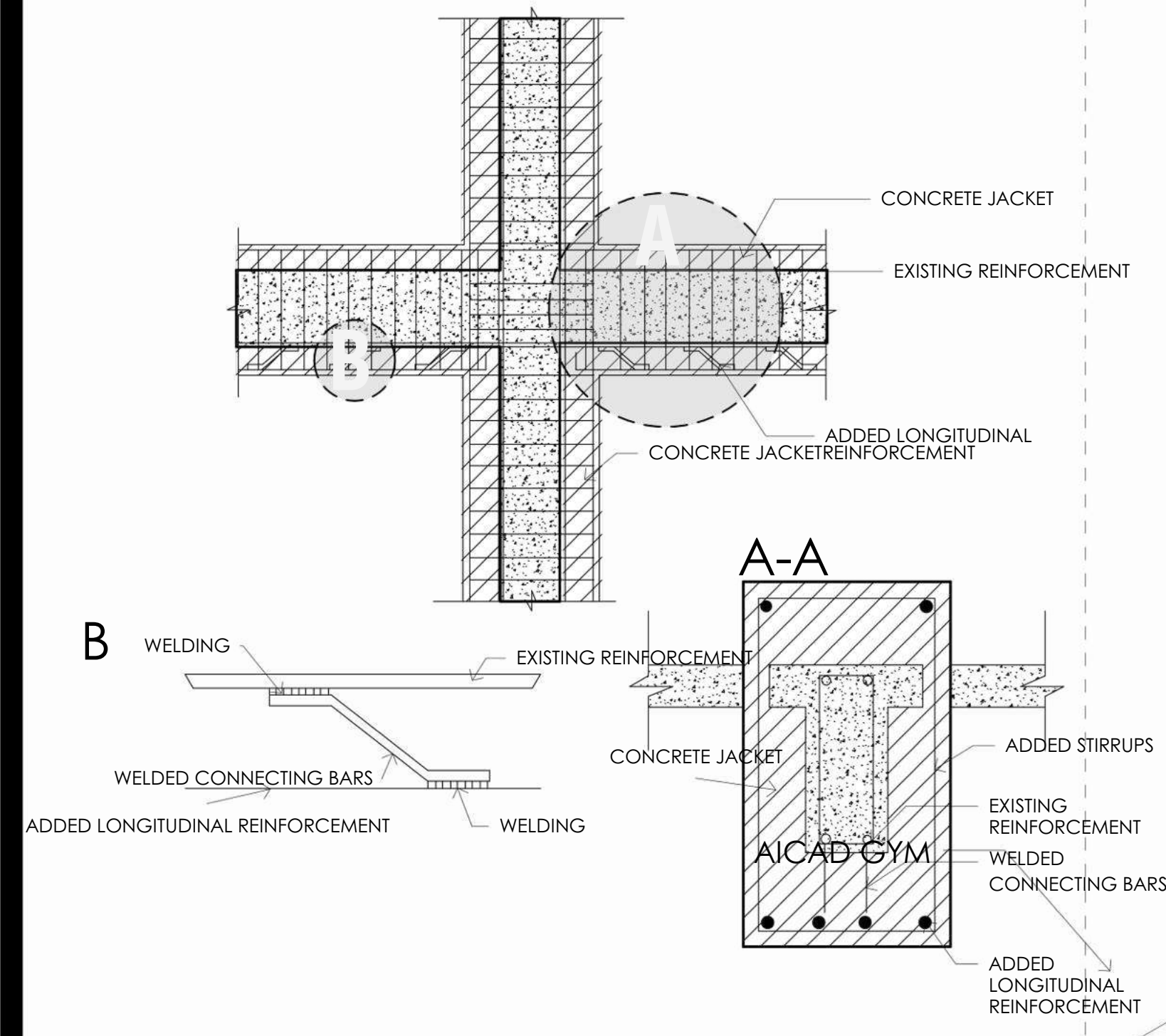
SCALE 1:10

SLAB RETROFIT DETAIL



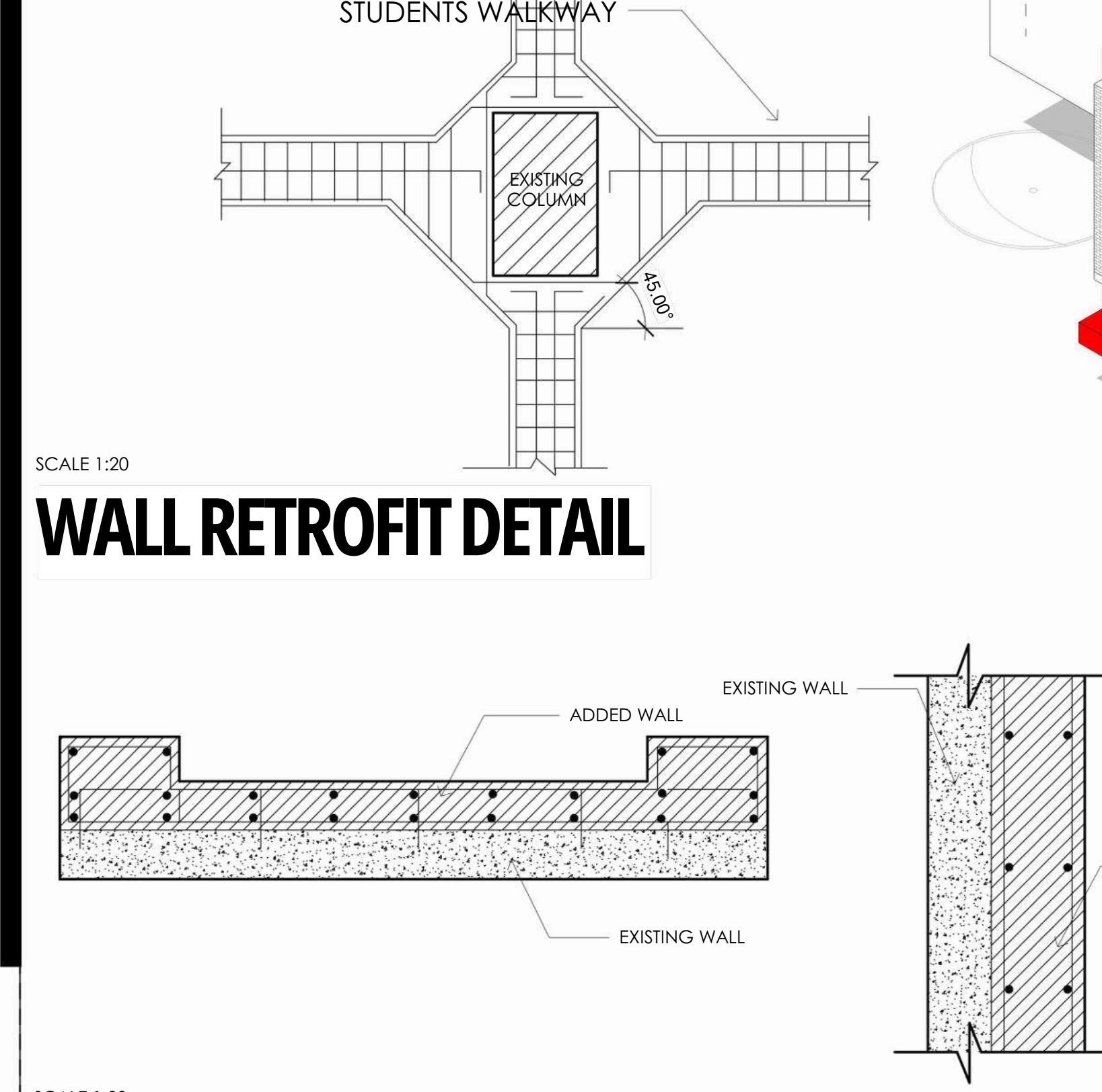
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BEAM RETROFIT DETAIL



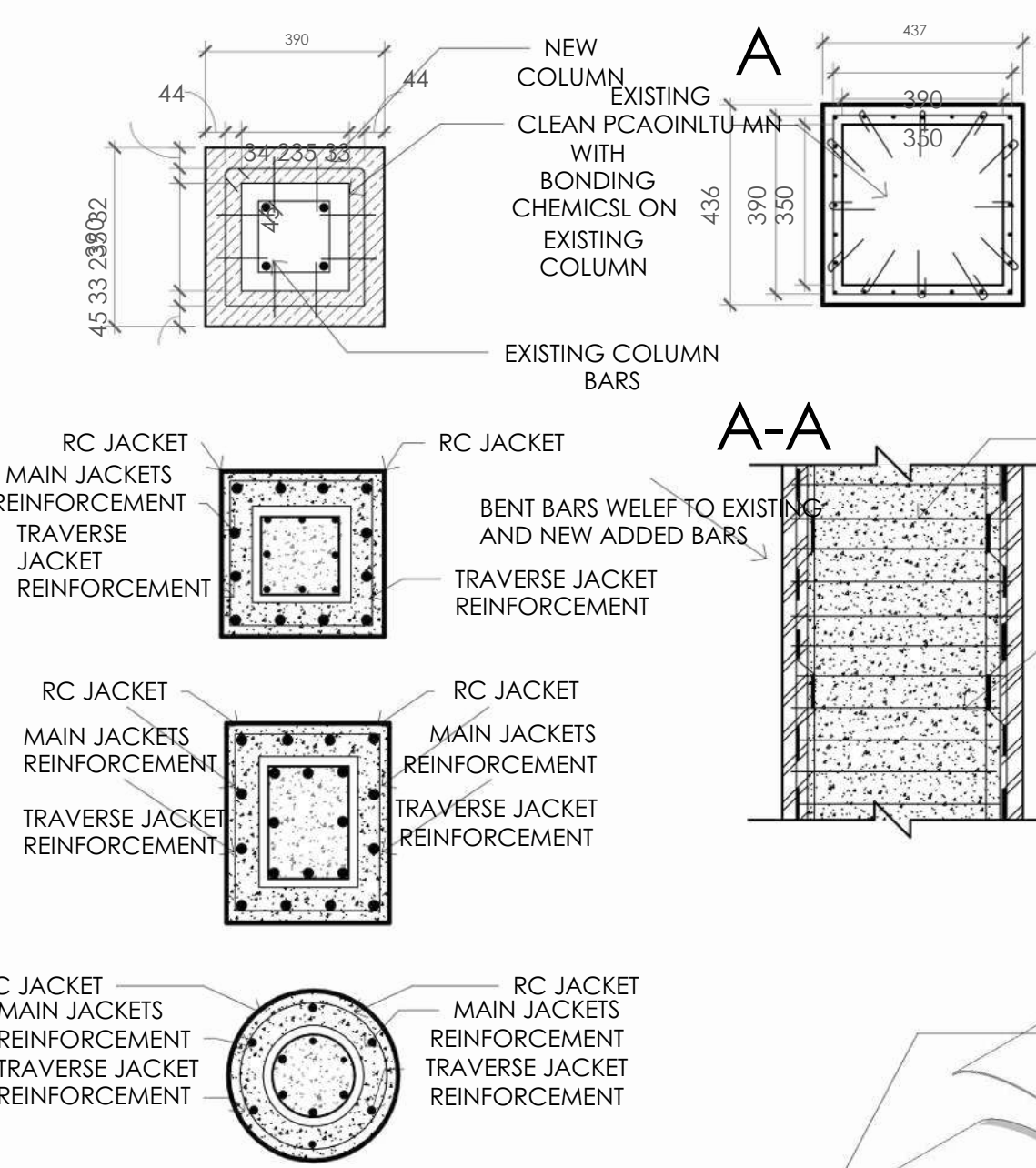
SCALE 1:20

WALL RETROFIT DETAIL



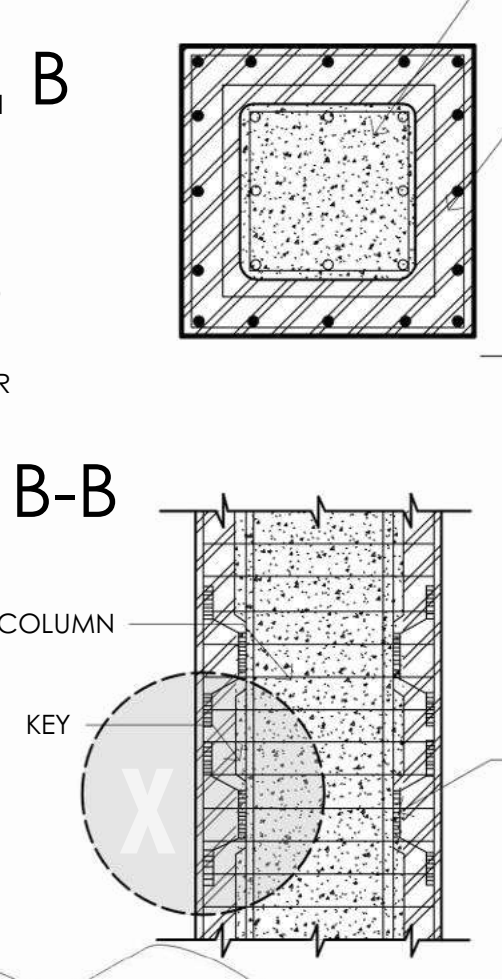
SCALE 1:20

COLUMN RETROFIT DETAIL

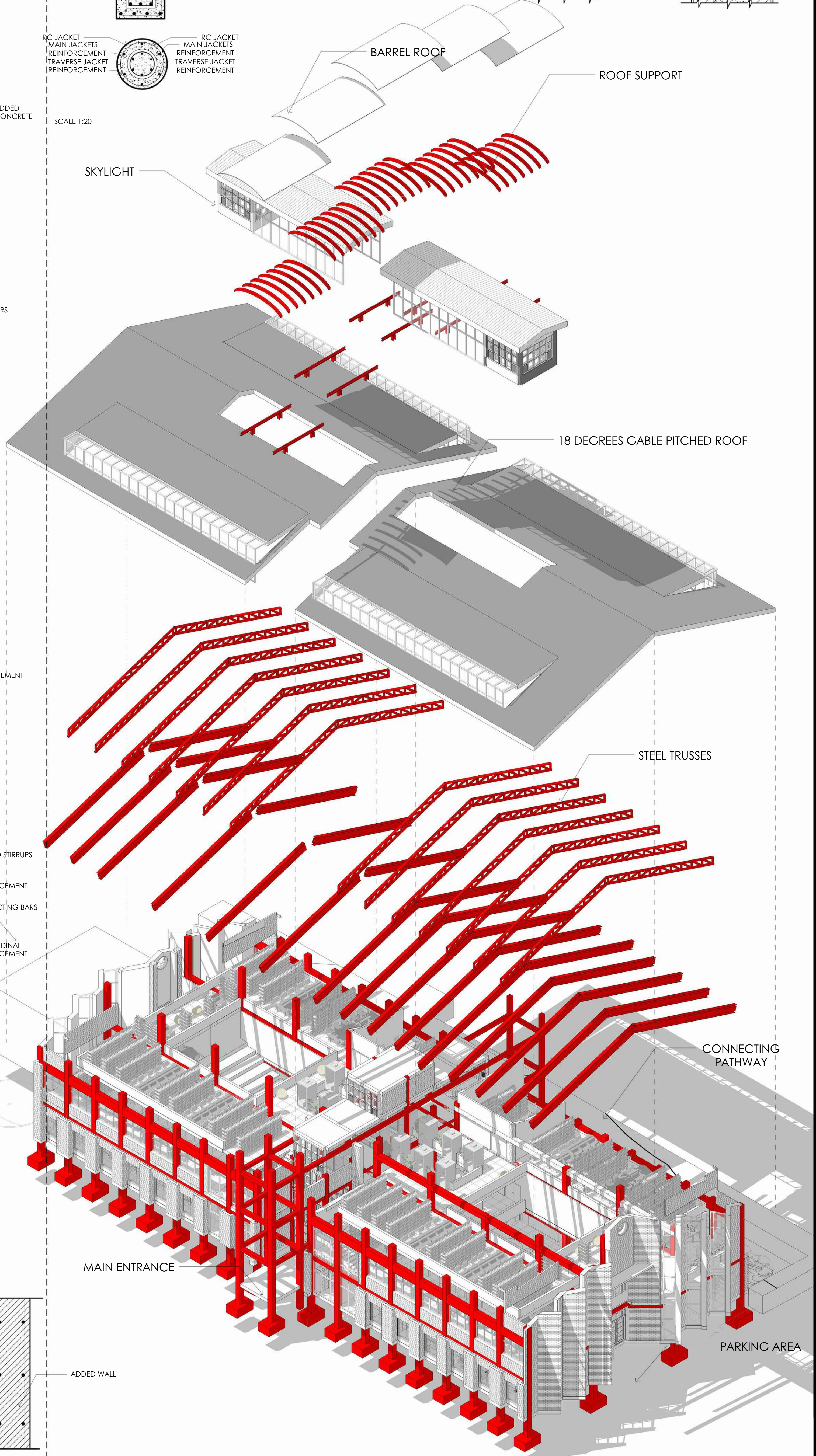
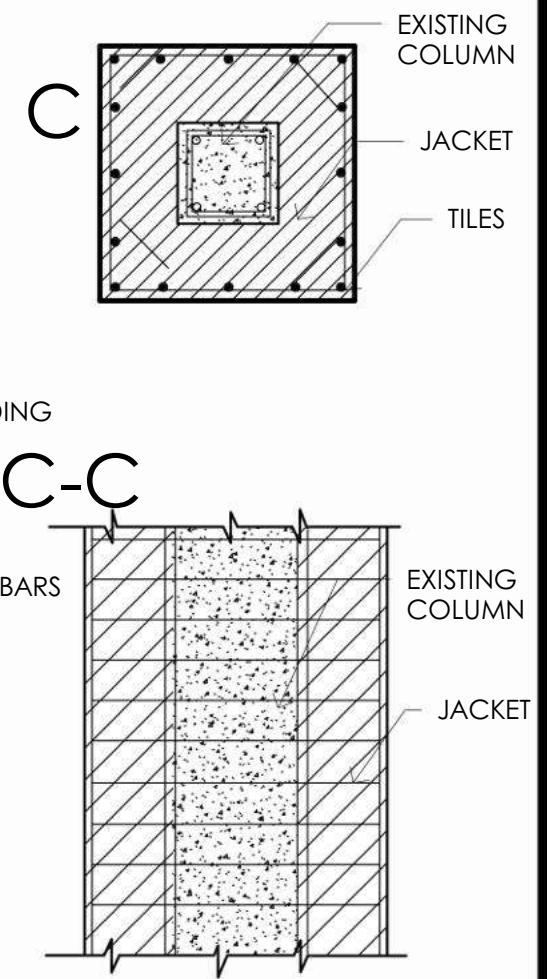


SCALE 1:20

OPTION 2



OPTION 3

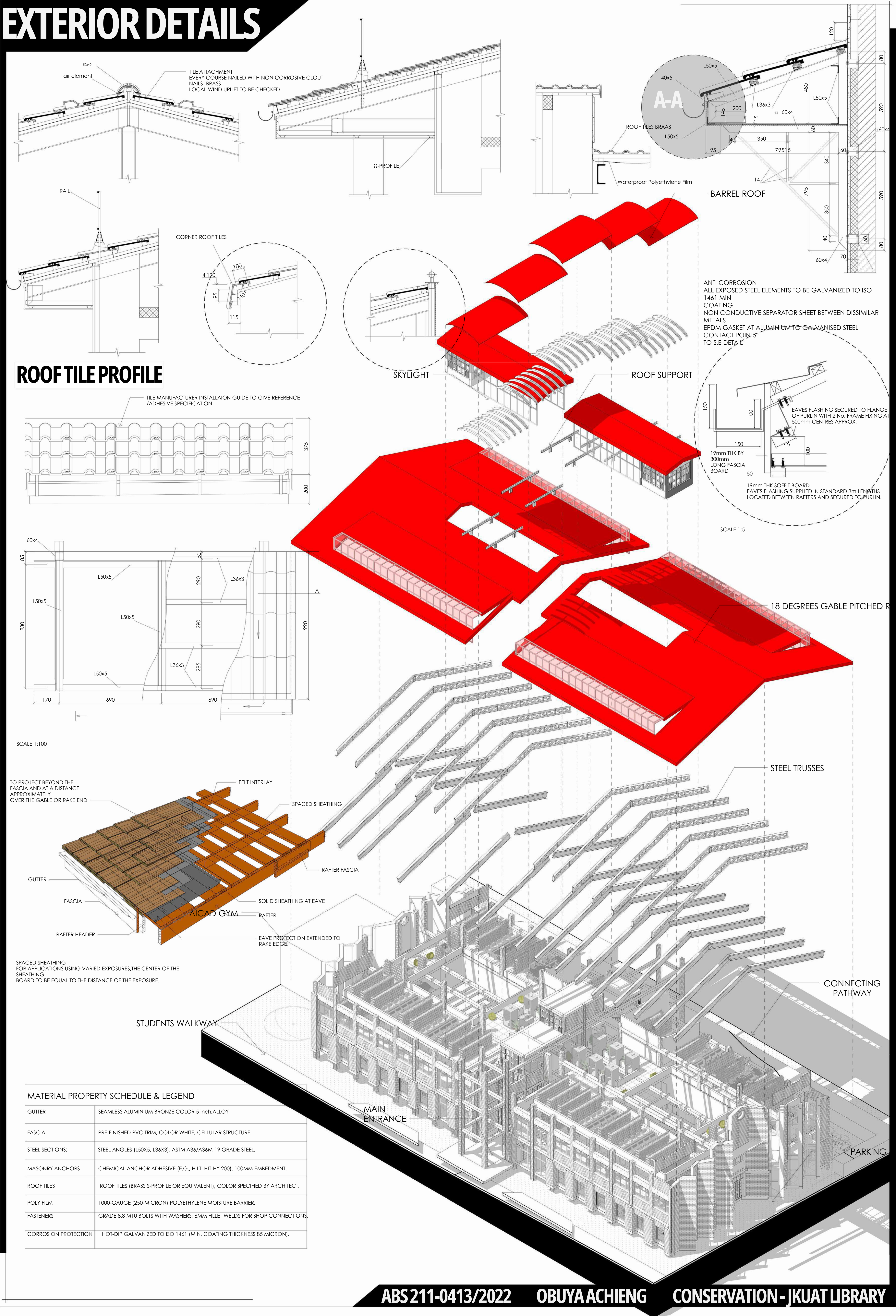


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OBUYA ACHIENG

CONSERVATION - JKUAT LIBRARY

EXTERIOR DETAILS

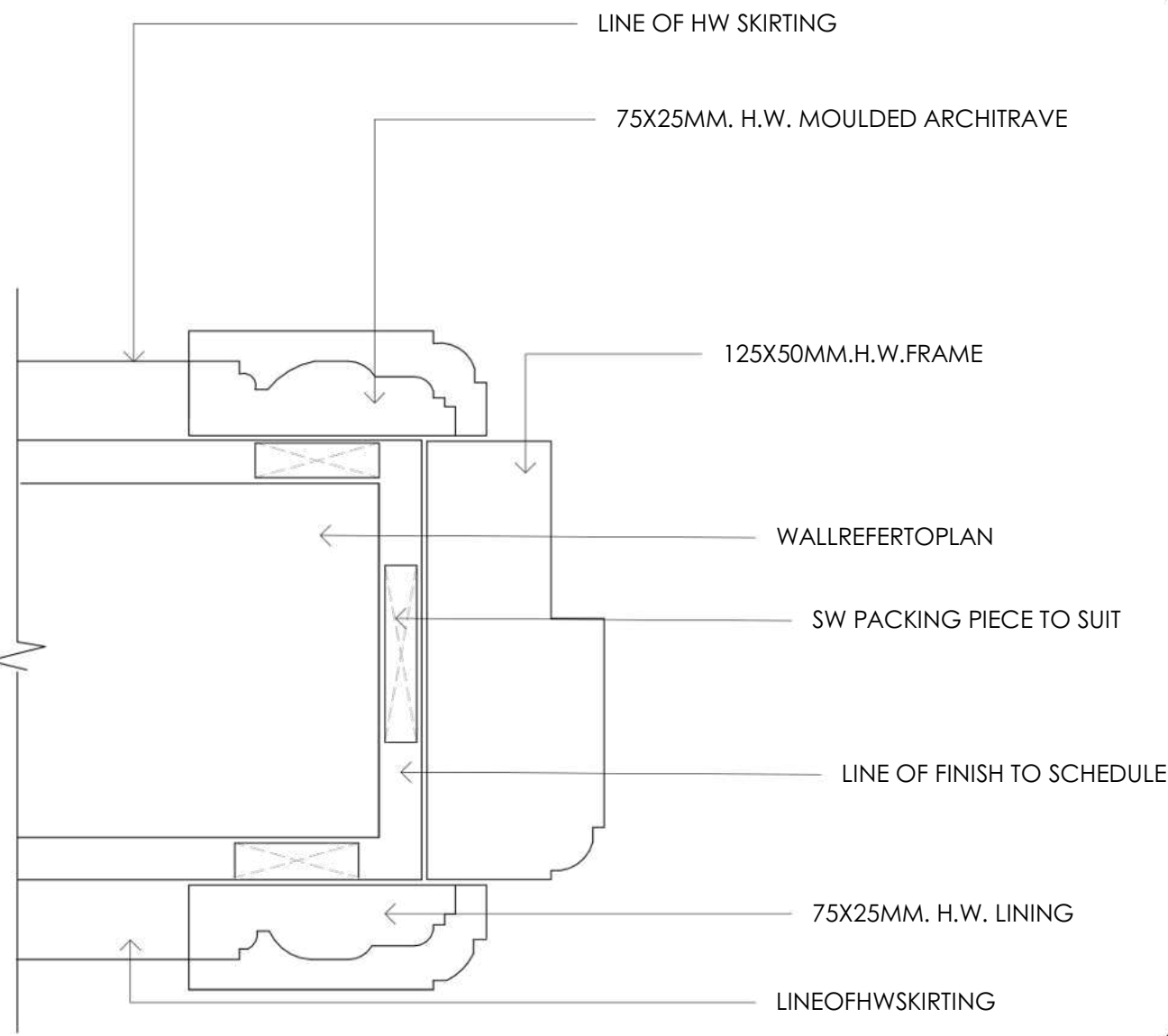


WINDOW SCHEDULES

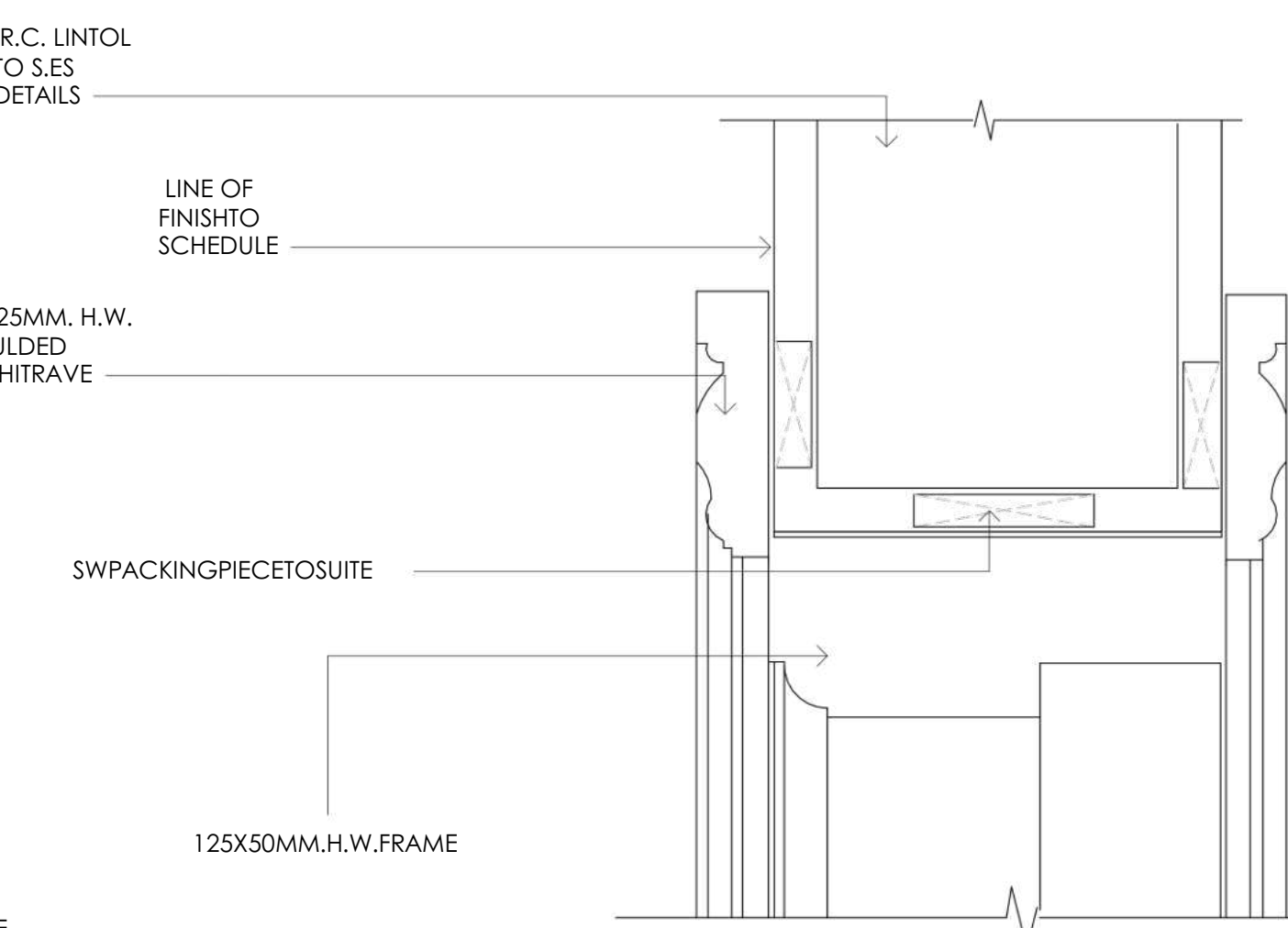
WINDOW TYPE A	FIXED	QUANTITY GROUND FLOOR	WINDOW TYPE B	OPENING - OUTWARD	QUANTITY GROUND FLOOR FIRST FLOOR	WINDOW TYPE C	OPENING - OUTWARD	QUANTITY GROUND FLOOR FIRST FLOOR	WINDOW TYPE D	OPENING - OUTWARD	QUANTITY GROUND FLOOR FIRST FLOOR
WINDOW PANEL AND FINISH FRAME: 100 MM BY 50 MM WROUGHT MAHOGANY TIMBER FRAME, REBATED FOR GLAZING AND PANELS. INFILL: 45MM SEMI-SOLID CORE PANEL WITH 15 MM CYPRESS TIMBER TONGUE-AND-GROOVE CLADDING. GLAZING: 6 MM CLEAR FLOAT GLASS TO TOP LIGHTS, BEDDED IN STRUCTURAL SILICONE. FINISH: SANDED SMOOTH AND FINISHED WITH 3 COATS OF CLEAR UV-RESISTANT POLYURETHANE VARNISH (SATIN FINISH). IRONMONGERY: HEAVY-DUTY BRASS BUTT HINGES AND A MULTI-POINT LOCKING SYSTEM.			WINDOW PANEL AND FINISH FRAME: POWDER-COATED ALUMINUM CASEMENT SECTIONS (MINIMUM 1.5 MM THICKNESS). GLAZING: 6 MM THICK CLEAR TOUGHENED SAFETY GLASS WITH RUBBER GASKETS. OPERATION: TOP-HUNG VENTS AS INDICATED BY SWING LINES, FITTED WITH FRICTION STAYS. FINISH: MATTE CHARCOAL GREY POWDER COATING (MINIMUM 60 MICRONS). FIXING: FIXED TO MASONRY OPENING WITH 75 MM GALVANIZED STEEL LUGS AT 600 MM CENTERS, SEALED WITH WEATHER-RATED SILICONE.			WINDOW PANEL AND FINISH FRAME: POWDER-COATED ALUMINUM CASEMENT SECTIONS WITH INTEGRATED MULLION. GLAZING: 6 MM CLEAR TOUGHENED SAFETY GLASS. OPERATION: ONE SIDE-HUNG VENT AND ONE FIXED LIGHT. FINISH: MATTE CHARCOAL GREY POWDER COATING TO MATCH TYPE B. IRONMONGERY: STAINLESS STEEL COCKSPUR HANDLES AND CONCEALED FRICTION HINGES.			WINDOW PANEL AND FINISH FRAME: REINFORCED POWDER-COATED ALUMINUM SECTIONS WITH 50 MM INTERMEDIATE MULLIONS/TRANSOMS. GLAZING: 8 MM THICK CLEAR LAMINATED SAFETY GLASS (DUE TO LARGE SURFACE AREA). OPERATION: FIXED LIGHTS THROUGHOUT FOR MAXIMUM DAYLIGHTING. FINISH: MATTE CHARCOAL GREY POWDER COATING. WEATHERING: EXTERNAL ALUMINUM SILLS TO BE FITTED TO PREVENT WATER INGRESS INTO THE WALL CAVITY.		

WINDOW TYPE E	OUTWARD OPENING	QUANTITY GROUND FLOOR FIRST FLOOR	WINDOW TYPE F	OUTWARD OPENING	QUANTITY FIRST FLOOR	WINDOW TYPE G	OUTWARD OPENING	QUANTITY GROUND FLOOR FIRST FLOOR
WINDOW PANEL AND FINISH GLAZING: 6 MM THICK CLEAR TOUGHENED SAFETY GLASS BEDDED IN EPDM RUBBER GASKETS. OPERATION: TWO TOP-HUNG VENTS AT THE UPPER LEVEL; BOTTOM THREE PANELS ARE FIXED LIGHTS FINISH: MATTE CHARCOAL GREY POWDER COATING (MINIMUM 60 MICRONS). IRONMONGERY: HEAVY-DUTY FRICTION STAYS FOR VENTS AND CAM-HANDLE LOCKING MECHANISMS. FIXING: FIXED TO MASONRY WITH GALVANIZED STEEL LUGS AT 600 MM CENTERS, SEALED WITH WEATHER-RATED SILICONE.			WINDOW PANEL AND FINISH FRAME: CIRCULAR CURVED ALUMINUM PROFILE OR STEAM-BENT HARDWOOD FRAME (MAHOGANY). GLAZING: 6 MM CLEAR LAMINATED SAFETY GLASS (CUT TO CIRCULAR TEMPLATE). OPERATION: FIXED LIGHT (NON-OPENING) FOR ARCHITECTURAL FEATURE. FINISH: IF ALUMINUM: MATTE CHARCOAL GREY POWDER COATING. IF TIMBER: 3 COATS OF CLEAR UV-RESISTANT POLYURETHANE VARNISH. SEALING: CONTINUOUS PERIMETER WEATHER-SEAL TO ENSURE WATERTIGHTNESS ON THE CURVED PROFILE.			WINDOW PANEL AND FINISH FRAME: REINFORCED POWDER-COATED ALUMINUM SECTIONS WITH 25 MM DECORATIVE GLAZING BARS (GRIDS) TO MATCH THE INDICATED PATTERN. GLAZING: 6 MM CLEAR TOUGHENED SAFETY GLASS. OPERATION: FIXED LIGHTS THROUGHOUT (OR SPECIFY IF CERTAIN PANELS ARE SIDE-HUNG CASEMENTS). FINISH: MATTE CHARCOAL GREY POWDER COATING. TECHNICAL NOTE: ALL GLAZING BARS TO BE INTERNALLY FITTED OR STRUCTURALLY BONDED TO THE GLASS SURFACE. WEATHERING: EXTERNAL ALUMINUM SILL WITH A 15 DEGREE SLOPE TO BE PROVIDED TO THE FULL WIDTH OF THE WINDOW OPENING.		

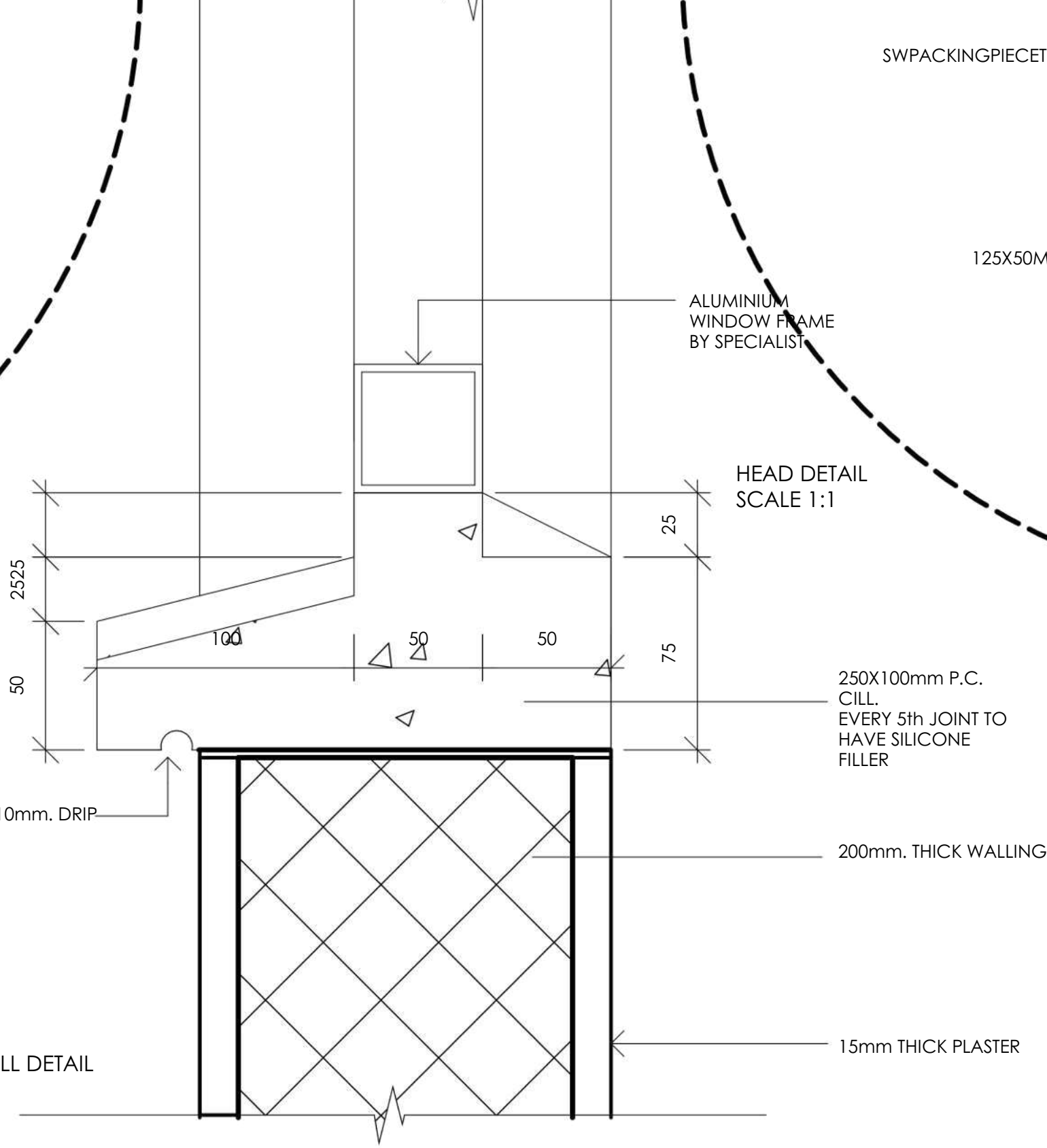
JAMB DETAIL
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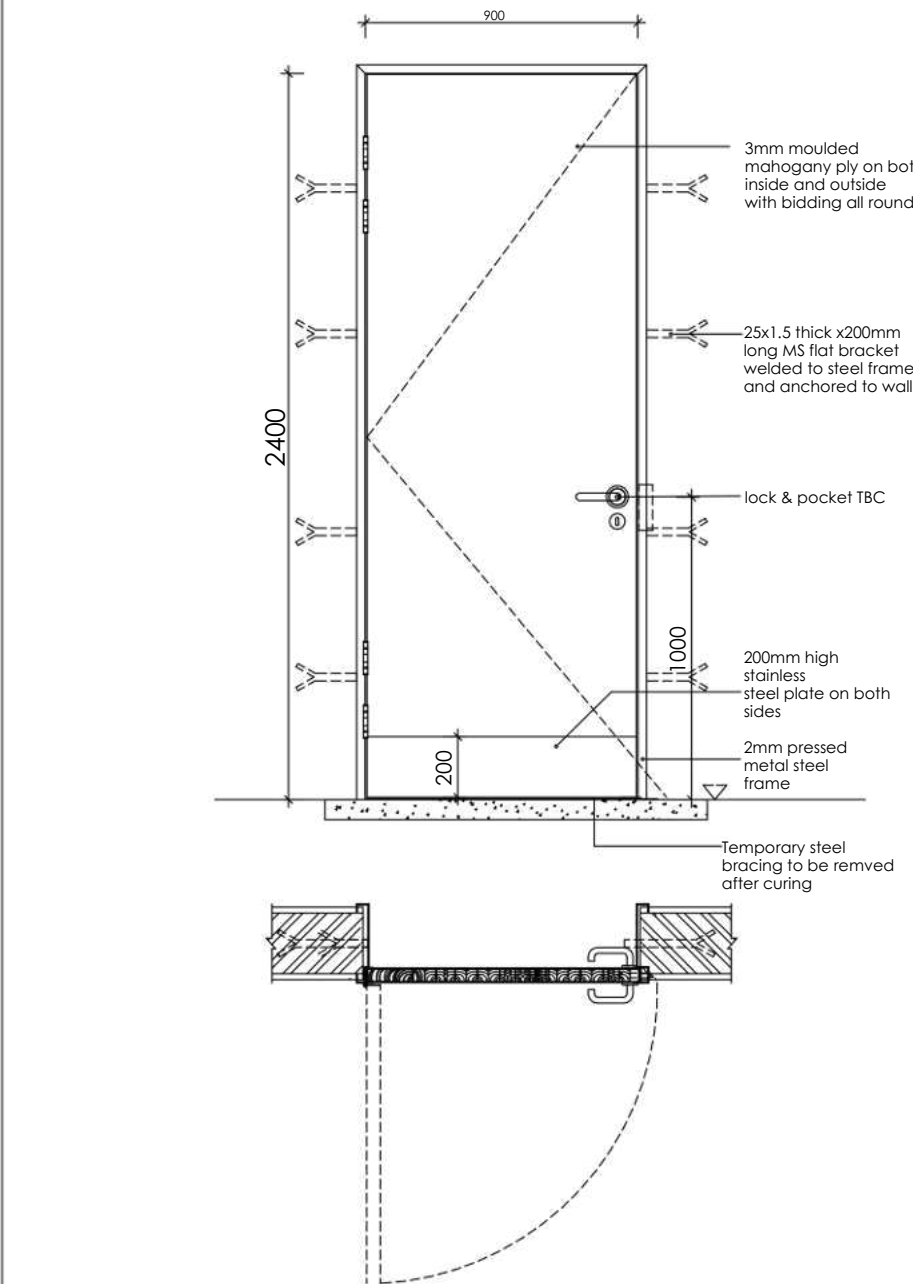
HEAD DETAIL
SCALE 1:1



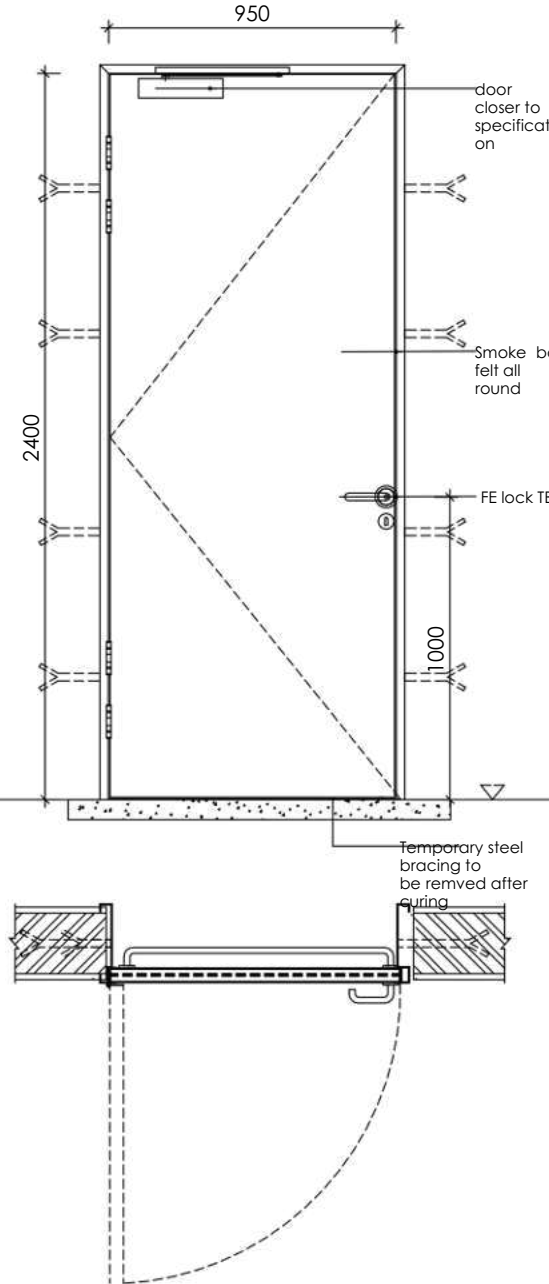
WINDOW SILL DETAIL
SCALE 1 : 2



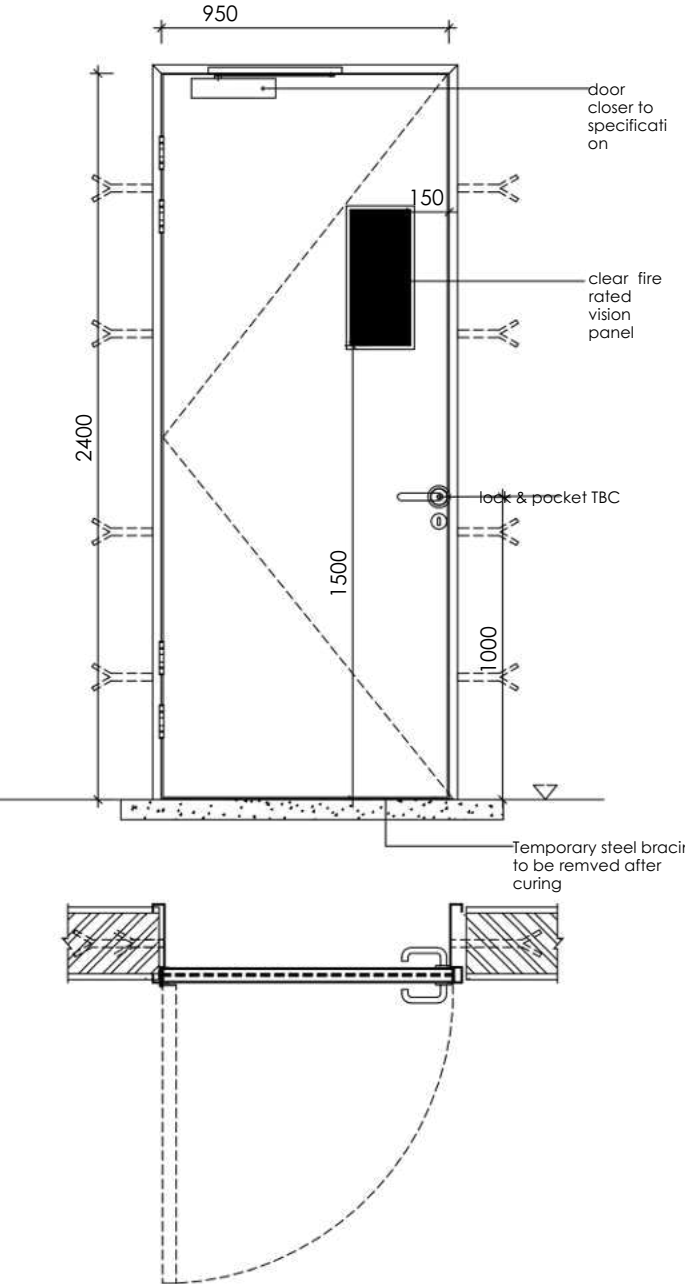
DOOR SCHEDULES



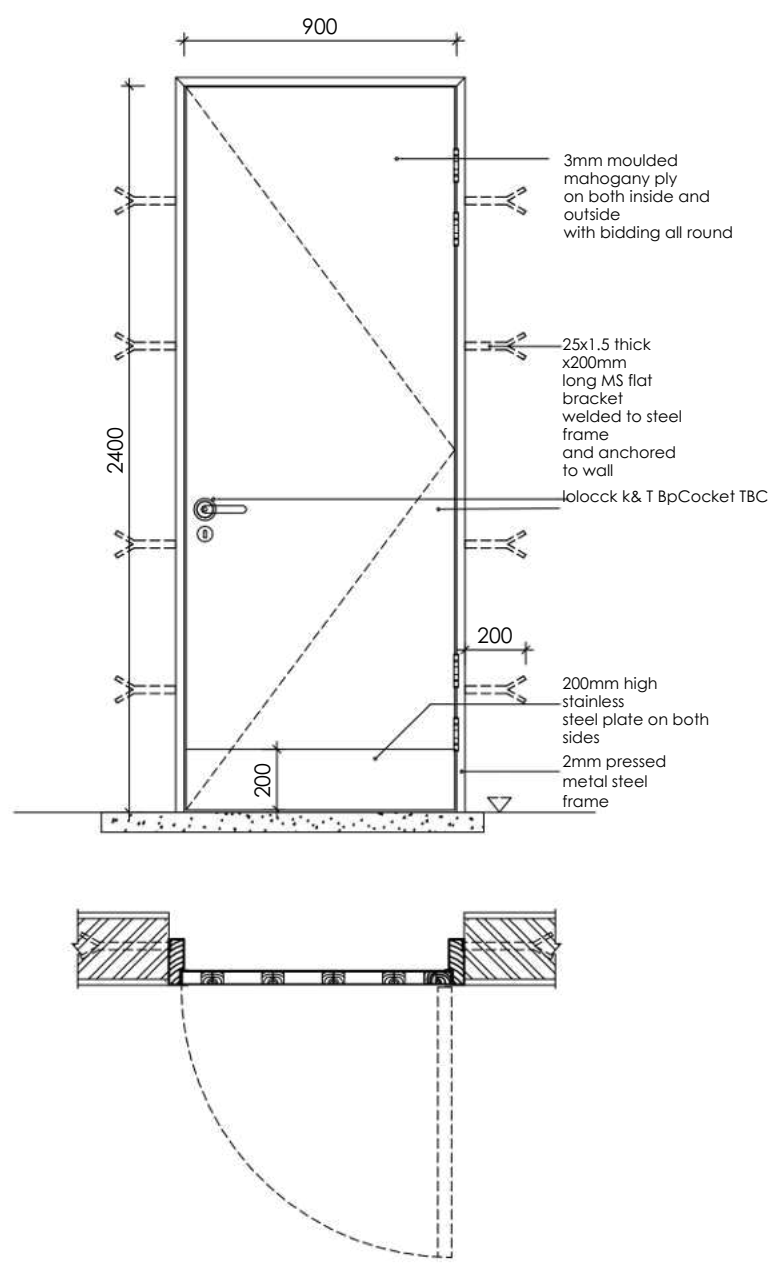
DOOR TYPE	A	SINGLE LEAF	QUANTITY	DOOR HAND	
				GROUND FLOOR	LFT / RHT
DOOR PANEL AND FINISH					
2400 X 900 X 45MM SEMI SOLID CORE DOOR WITH 15MM CYPRESS TIMBER CORE SANDWICHED BETWEEN 15MM THICK GROOVED MAHOGANY TIMBER AND MAHOGANY BIDDING ALL ROUND					
FINISH (INSIDE & OUTSIDE): 2 COAT CLEAR VANISH 260X40X2MM THICK PRESSED METAL STEEL FRAME FORMED TO SHAPE TO MATCH WIDTH OF WALL 240MM WALLS					
DOOR FRAME AND FINISH COMPLETE WITH 4 NO. 25X1.2MMX200MM LONG MS BRACKETS ANCHORS ON EACH SIDE FINISH: 1 COAT STEEL PRIMER & 2 COATS GLOSS ENAMEL PAINT					



DOOR TYPE	B	SINGLE LEAF FIRE DOOR	QUANTITY	DOOR HAND	
				GROUND FLOOR	FIRST FLOOR
DOOR PANEL AND FINISH					
2400 X 950 X 55MM FIRE ESCAPE DOOR WITH INTERNAL FIRE BARRIER TO A 2HR FIRE RATING FINISH (INSIDE & OUTSIDE): 1 COAT PRIMER & 2 COATS GLOSS ENAMEL PAINT					
DOOR FRAME AND FINISH 260X40X2MM THICK PRESSED METAL STEEL FRAME FORMED TO SHAPE TO MATCH WIDTH OF WALL 240MM WALLS COMPLETE WITH 4NO. 25X1.2MMX200MM LONG MS BRACKETS ANCHORS ON EACH SIDE FINISH: 1 COAT STEEL PRIMER & 2 COATS GLOSS ENAMEL PAINT					

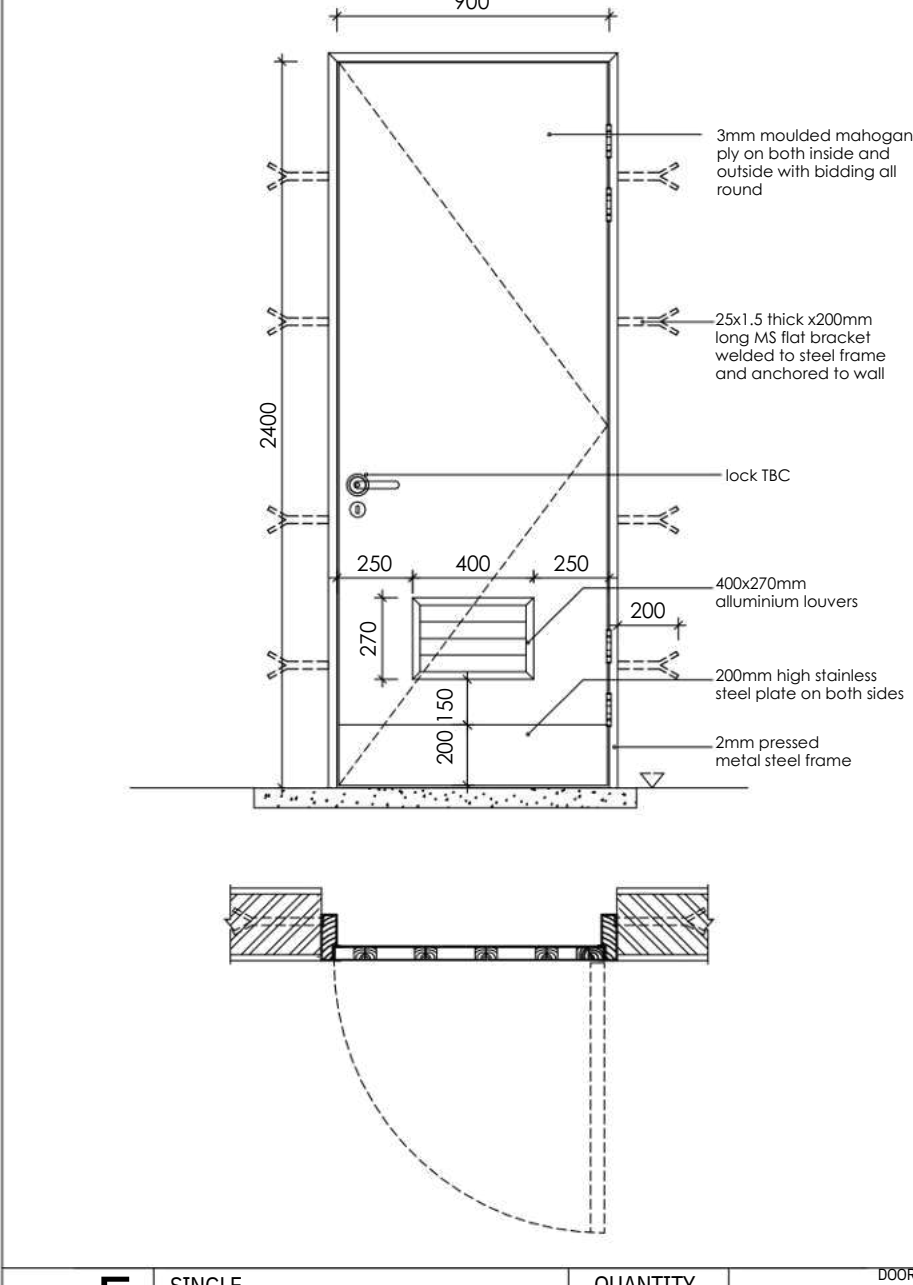


C	DOUBLE STEEL DOORS-PASSAGES	QUANTITY	DOOR HAND	
			LHS	RHS
		GROUND FLOOR		
DOOR PANEL AND FINISH				
2400 X 950 x 50MM SECURITY STEEL DOOR- MS PLATE ON SHS 40X4MM THICK FINISH (INSIDE & OUTSIDE): 1 COAT PRIMER & 2 COATS GLOSS ENAMEL PAINT				
DOOR FRAME AND FINISH				
260X40X2MM THICK PRESSED METAL STEEL FRAME FORMED TO SHAPE TO MATCH WIDTH OF WALL 240MM WALLS COMPLETE WITH 4NO. 25X1.2MMX200MM LONG MS BRACKETS ANCHORS ON EACH SIDE FINISH: 1 COAT STEEL PRIMER & 2 COATS GLOSS ENAMEL PAINT				

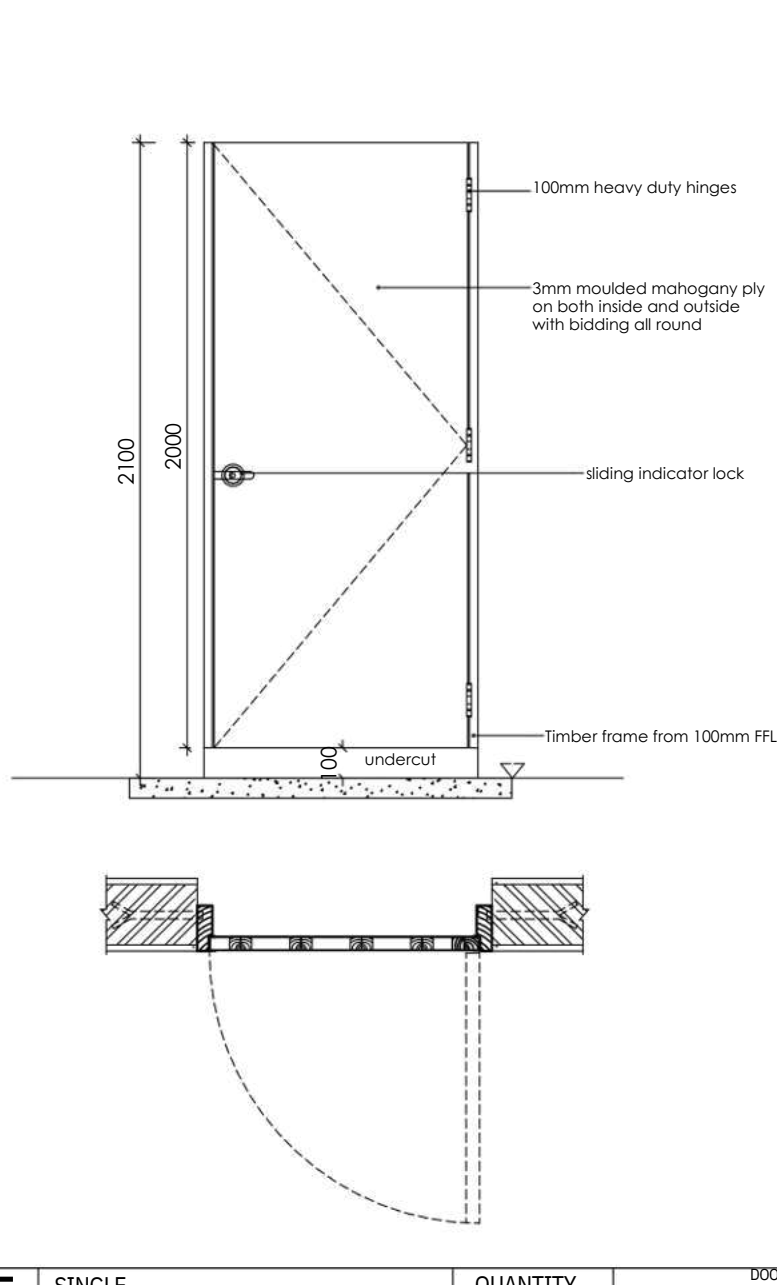


D	SINGLE TOILET DOORS	QUANTITY	DOOR HAND	
			GROUND FLOOR	1ST
		FIRST FLOOR		

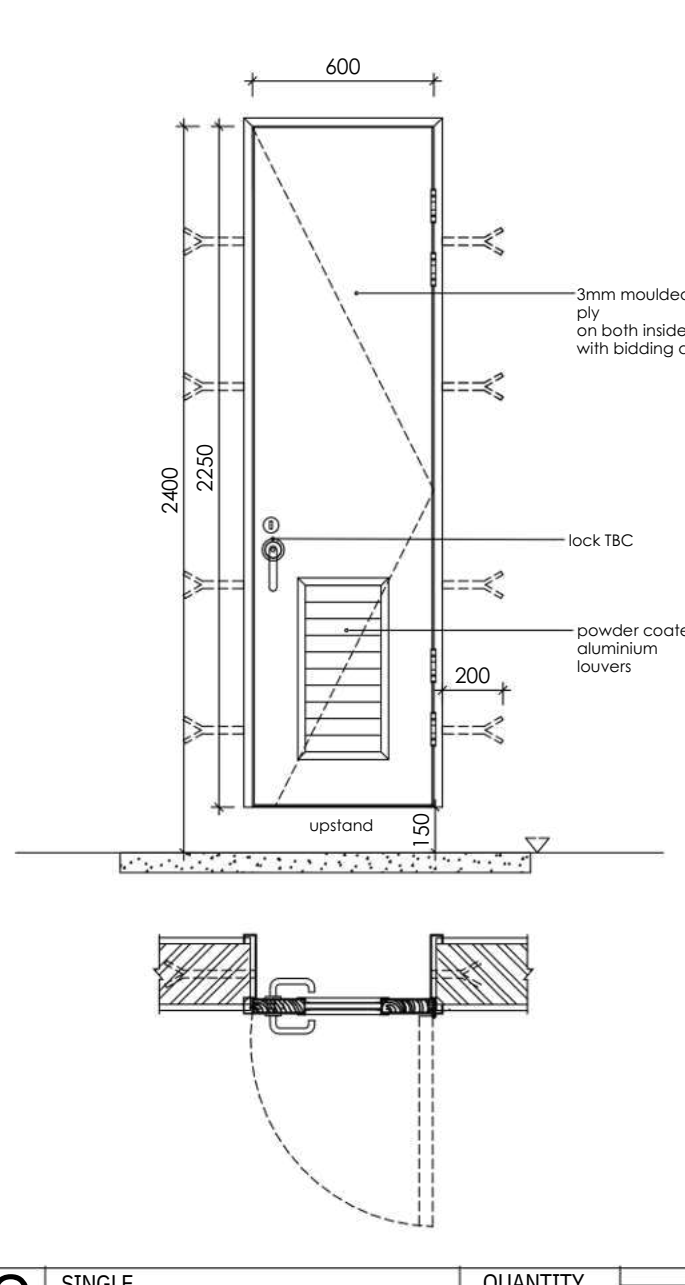
DOOR PANEL AND FINISH	
2400 X 900 X 45MM SEMI SOLID CORE DOOR WITH 15MM CYPRESS TIMBER CORE SANDWICHED BETWEEN 15MM THICK GROOVED MAHOGANY TIMBER AND MAHOGANY BIDDING ALL ROUND	
FINISH (INSIDE & OUTSIDE): 2 COAT CLEAR VANISH	
DOOR FRAME AND FINISH 150X45MM CYPRESS TIMBER FRAMING WITH 75X20MM ARCHITRAVE ALL ROUND FINISH: 1 COAT TIMBER PRIMER & 2 COATS STAIN PAINT	



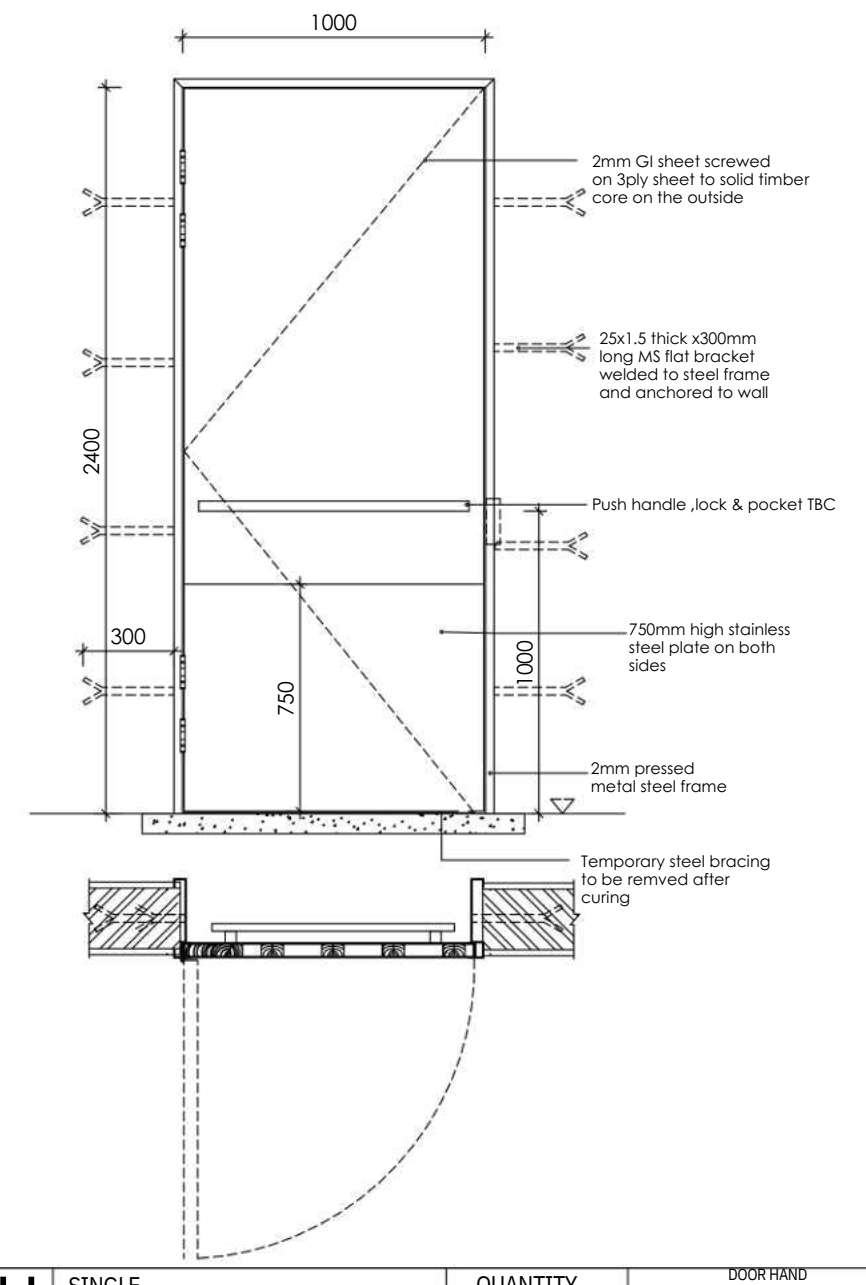
	JANITOR/STORE	GROUND FLOOR
DOOR PANEL AND FINISH		
2400 X 900 X 45MM SEMI SOLID CORE DOOR WITH 15MM CYPRESS TIMBER CORE SANDWICHED BETWEEN 15MM THICK GROOVED MAHOGANY TIMBER AND MAHOGANY BIDDING ALL ROUND DOOR FRAME AND FINISH		
150X45MM CYPRESS TIMBER FRAMING WITH 75X20MM ARCHITRAVE ALL ROUND FINISH: 1 COAT TIMBER PRIMER & 2 COATS STAIN PAINT		
FINISH (INSIDE & OUTSIDE): 2 COAT CLEAR VANISH		



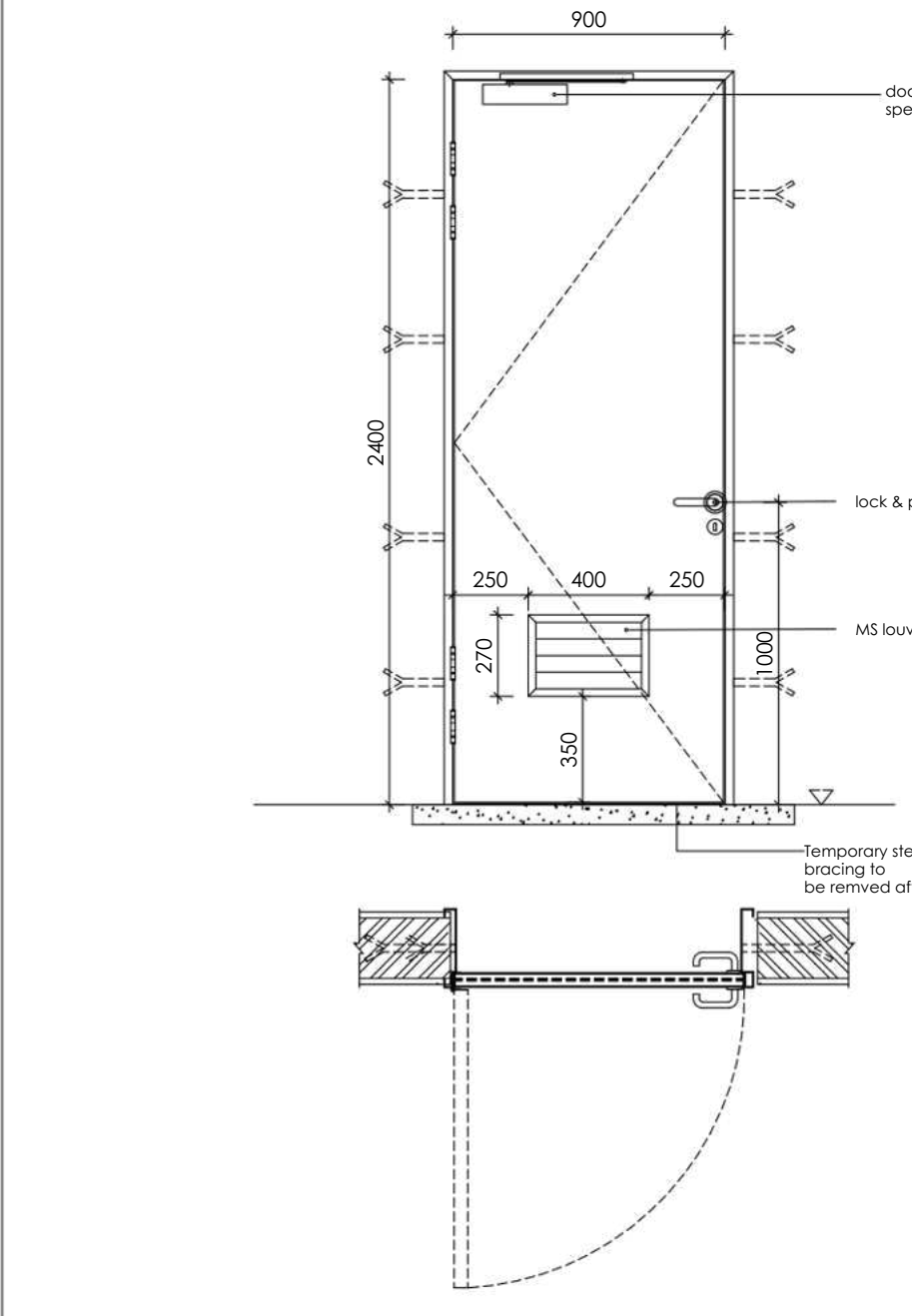
TOILET CUBICLES		FIRST FLOOR		
DOOR PANEL AND FINISH				
2000 X 800 X 45MM SEMI SOLID CORE DOOR WITH 15MM CYPRESS TIMBER CORE SANDWICHED BETWEEN 15MM THICK GROOVED MAHOGANY TIMBER AND MAHOGANY BIDDING ALL ROUND FINISH (INSIDE & OUTSIDE):				
2 COAT CLEAR VARNISH				
DOOR FRAME AND FINISH				
150X45MM CYPRESS TIMBER FRAMING WITH 75X20MM ARCHITRAVE ALL ROUND FINISH: 1 COAT TIMBER PRIMER & 2 COATS STAIN PAINT				



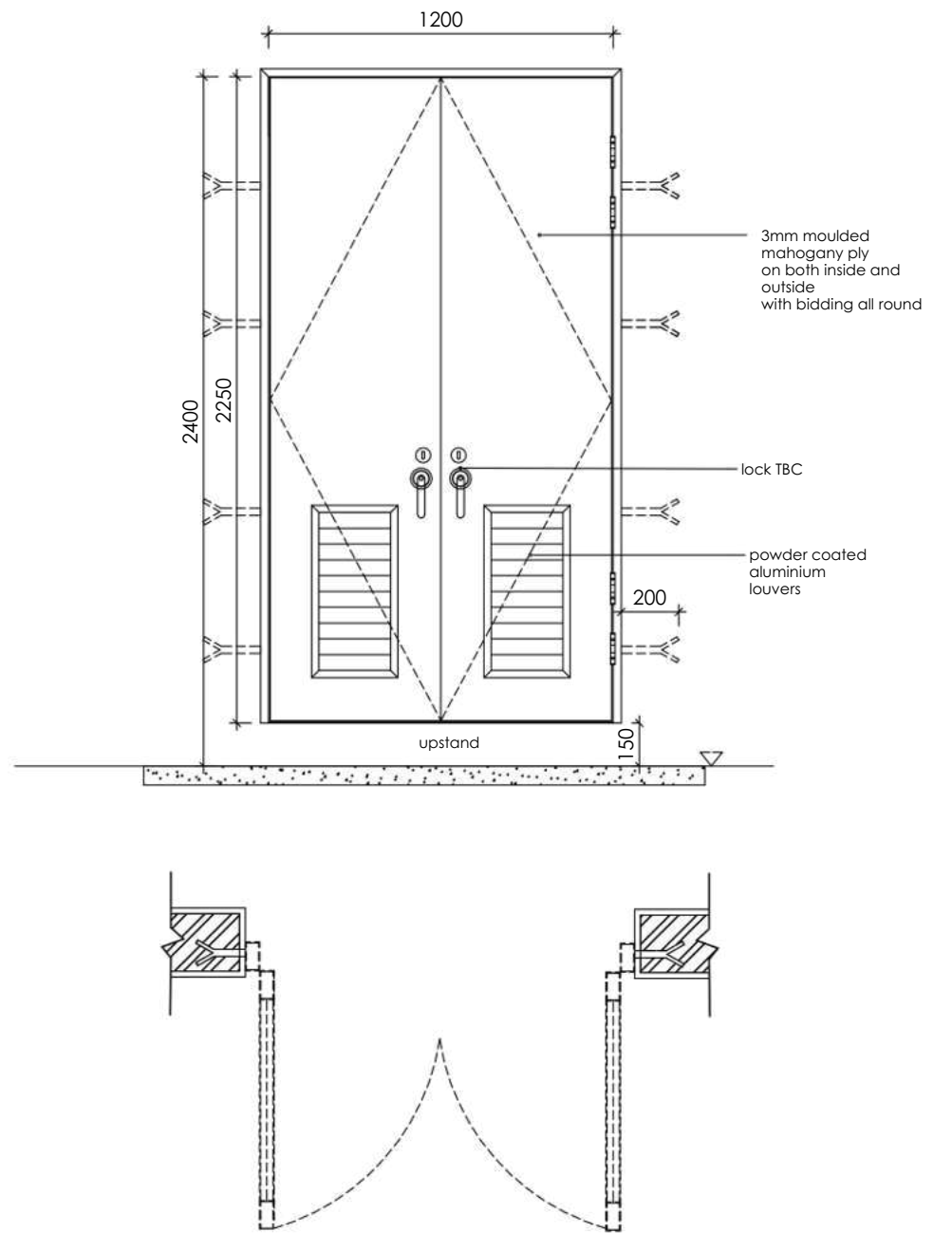
DOOR TYPE	G	SINGLE SERVICE DUCT DOOR	QUANTITY	DOOR HAND				
				GROUND FLOOR	FIRST FLOOR			
DOOR PANEL AND FINISH								
2250 X 600 X 45MM SOLID CORE TIMBER SANDWICHED WITH 3 PLY SHEET ON BOTH THE INSIDE AND OUTSIDE AND MAHOGANY BIDDING ALL ROUND WITH ALUMINIUM LOUVERED VENT								
FINISH (INSIDE & OUTSIDE):								
1 COAT TIMBER PRIMER & 2 COATS POLYURETHANE ENAMEL PAINT								
DOOR FRAME AND FINISH								
150X40X2MM THICK PRESSED METAL STEEL FRAME FORMED TO SHAPE TO MATCH WIDTH OF WALL 240MM WALLS COMPLETE WITH 4NO. 25X1.2MMX200MM LONG MS BRACKETS ANCHORS ON EACH SIDE								
FINISH: 1 COAT STEEL PRIMER & 2 COATS GLOSS ENAMEL PAINT								



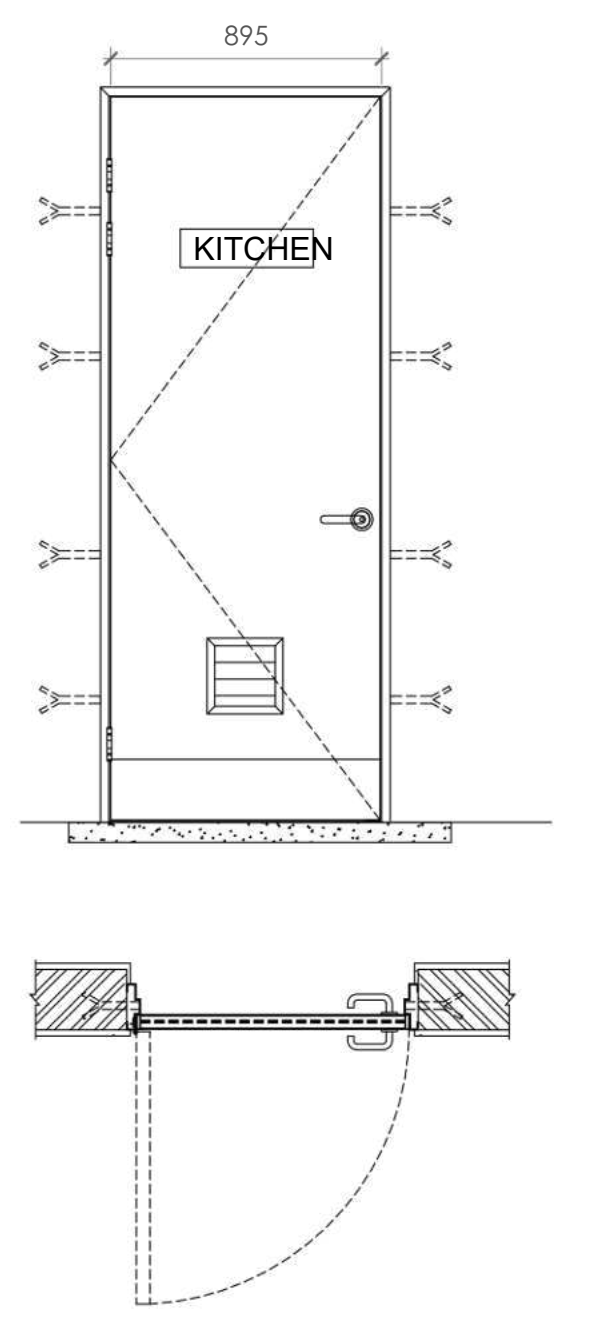
		DISABLED TOILET	
DOOR PANEL AND FINISH			
2400 X 1000 X 45MM SOLID CORE DOOR WITH 15MM CYPRESS TIMBER CORE SANDWICHED BETWEEN 15MM THICK GROOVED MAHOGANY TIMBER AND MAHOGANY BIDDING ALL ROUND			
FINISH (INSIDE & OUTSIDE):			
2 COAT CLEAR VANISH			
DOOR FRAME AND FINISH			
260X40X2MM THICK PRESSED METAL STEEL FRAME FORMED TO SHAPE TO MATCH WIDTH OF WALL 240MM WALLS COMPLETE WITH 4NO. 25X1.2MMX200MM LONG MS BRACKETS ANCHORS ON EACH SIDE			
FINISH: 1 COAT STEEL PRIMER & 2 COATS GLOSS ENAMEL PAINT			



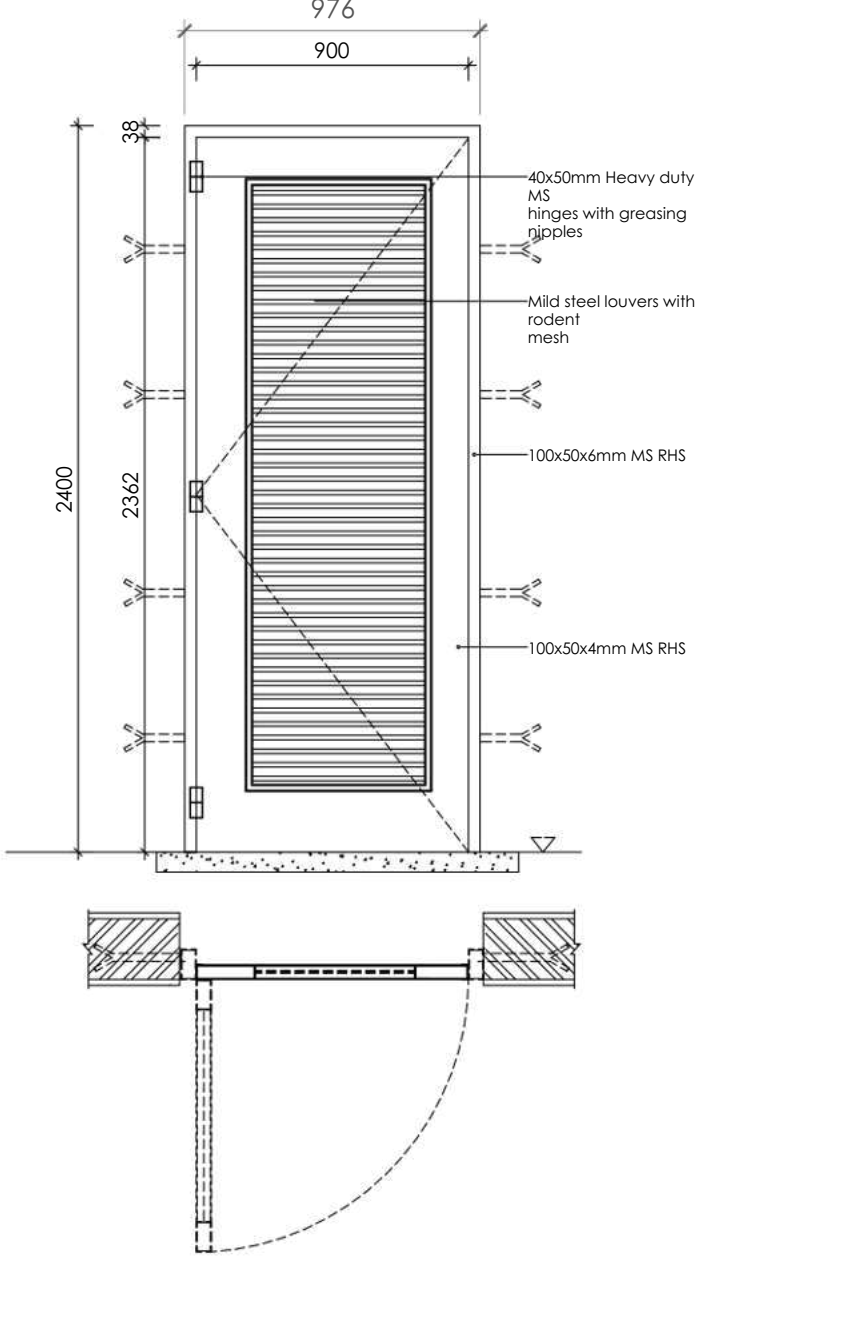
1	STEEL DOORS-EXTERNAL	GROUND FLOOR	QTY	UNIT
	DOOR PANEL AND FINISH			
	2400 X 900 x 50MM SECURITY STEEL DOOR- MS PLATE ON SHS 40X4MM THICK WITH LOUVERS & RODENT MESH FINISH (INSIDE & OUTSIDE): 1 COAT PRIMER & 2 COATS GLOSS ENAMEL PAINT			
	DOOR FRAME AND FINISH			
	260X40X2MM THICK PRESSED METAL STEEL FRAME FORMED TO SHAPE TO MATCH WIDTH OF WALL 240MM WALLS COMPLETE WITH 4NO. 25X1.2MMX200MM LONG MS BRACKETS ANCHORS ON EACH SIDE			
	FINISH: 1 COAT STEEL PRIMER & 2 COATS GLOSS ENAMEL PAINT			



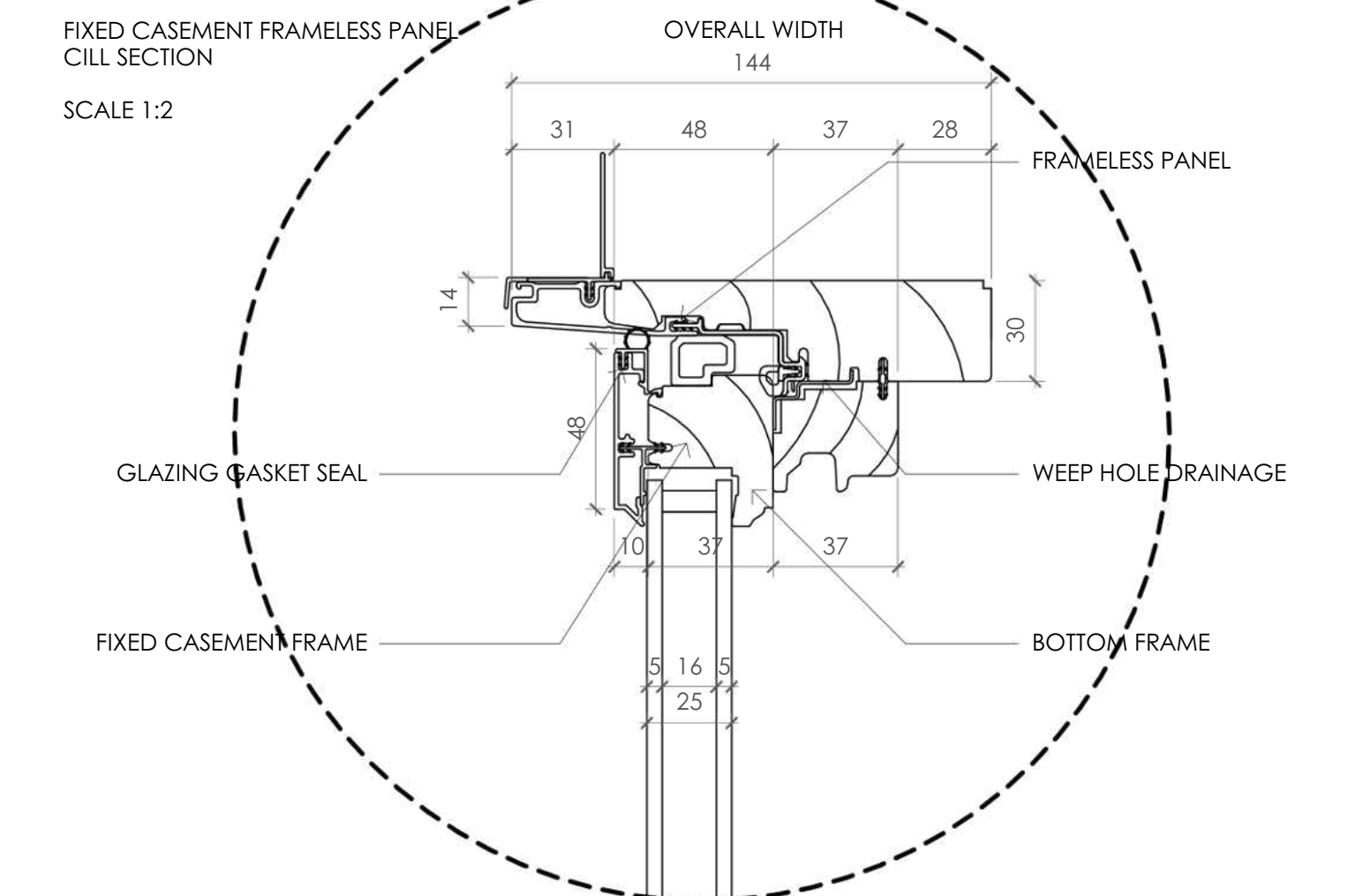
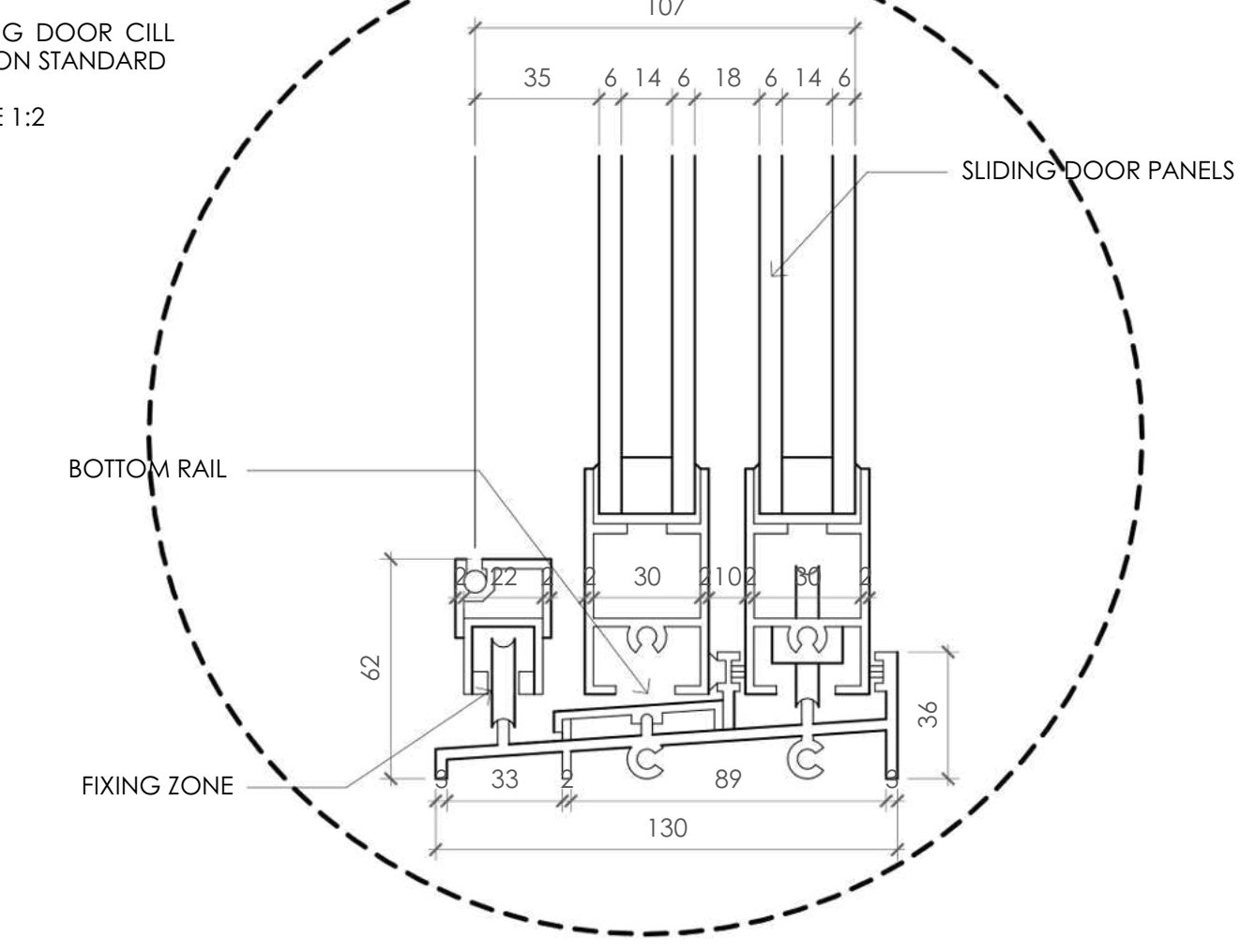
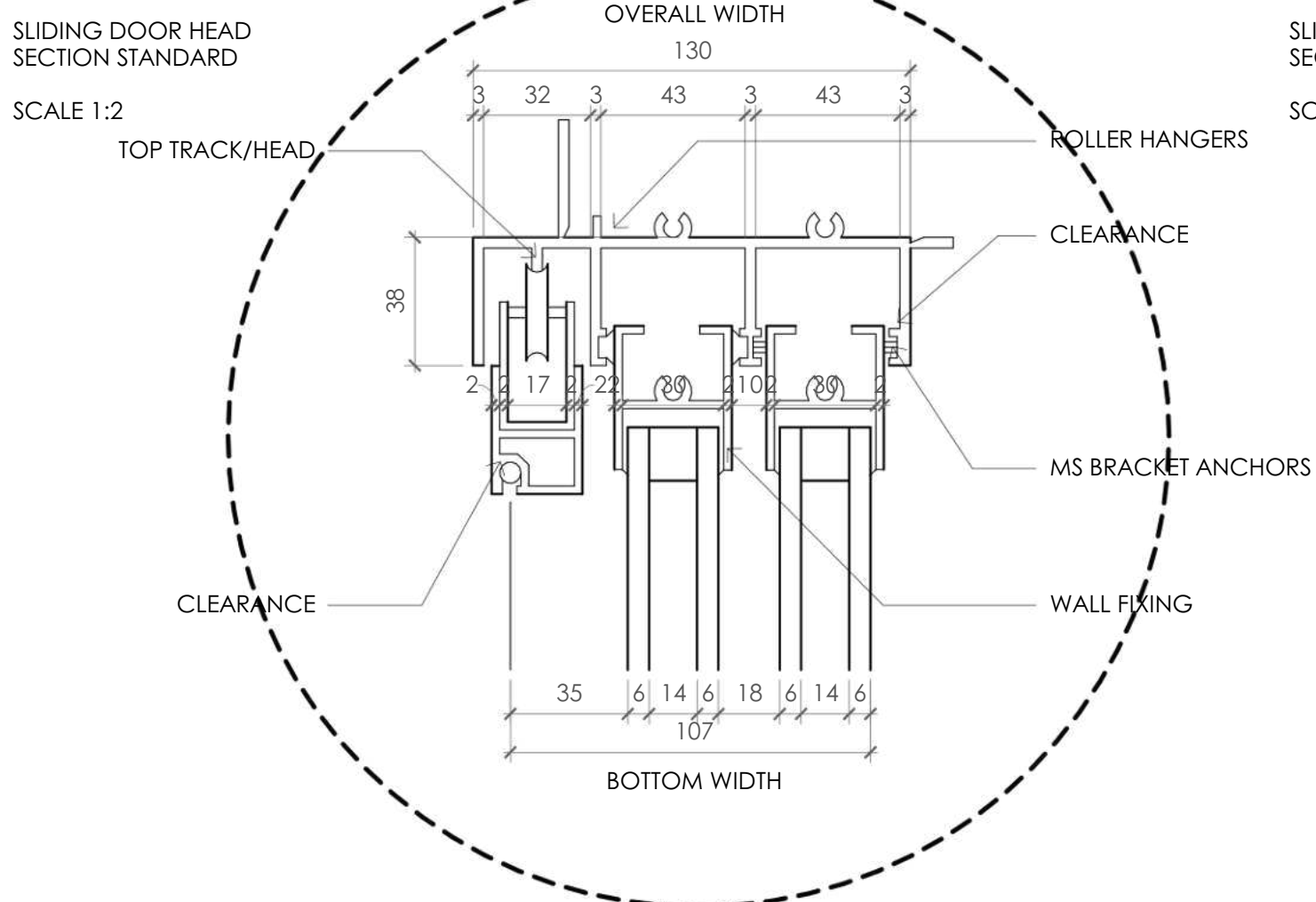
J	SERVICE DUCT DOOR	GROUND FLOOR	01	01
	DOOR PANEL AND FINISH			
	2250 X 1200 X 45MM SOLID CORE TIMBER SANDWICHED WITH 3 PLY SHEET ON BOTH THE INSIDE AND OUTSIDE AND MAHOGANY BIDDING ALL ROUND WITH ALUMINIUM LOUVERED VENT			
	FINISH (INSIDE & OUTSIDE):			
	1 COAT TIMBER PRIMER & 2 COATS POLYURETHANE ENAMEL PAINT			
	DOOR FRAME AND FINISH			
	150X40X2MM THICK PRESSED METAL STEEL FRAME FORMED TO SHAPE TO MATCH WIDTH OF WALL 240MM WALLS COMPLETE WITH 4NO. 25X1.2MMX300MM LONG MS BRACKETS ANCHORS ON EACH SIDE			
	FINISH: 1 COAT STEEL PRIMER & 2 COATS GLOSS ENAMEL PAINT			



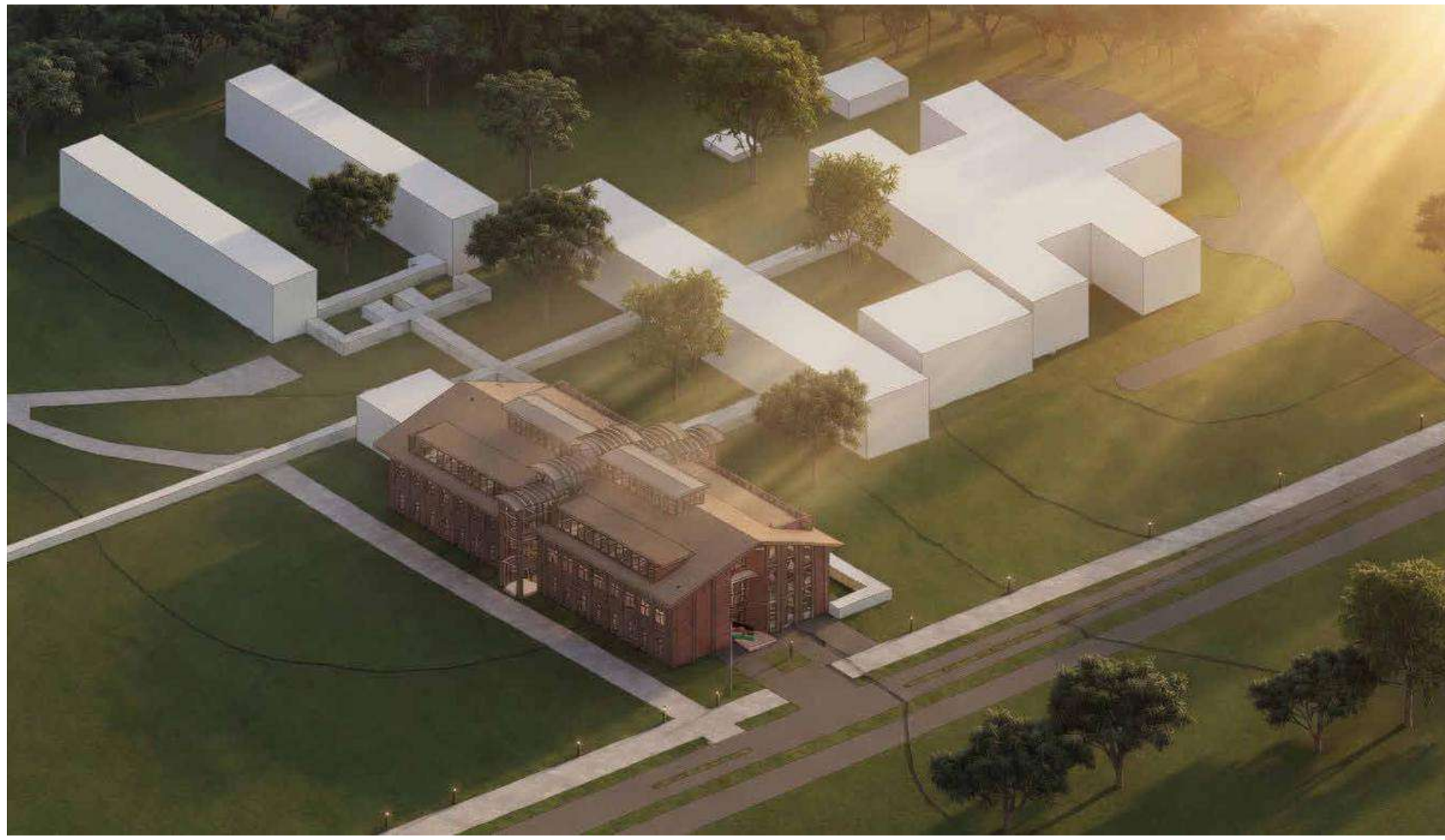
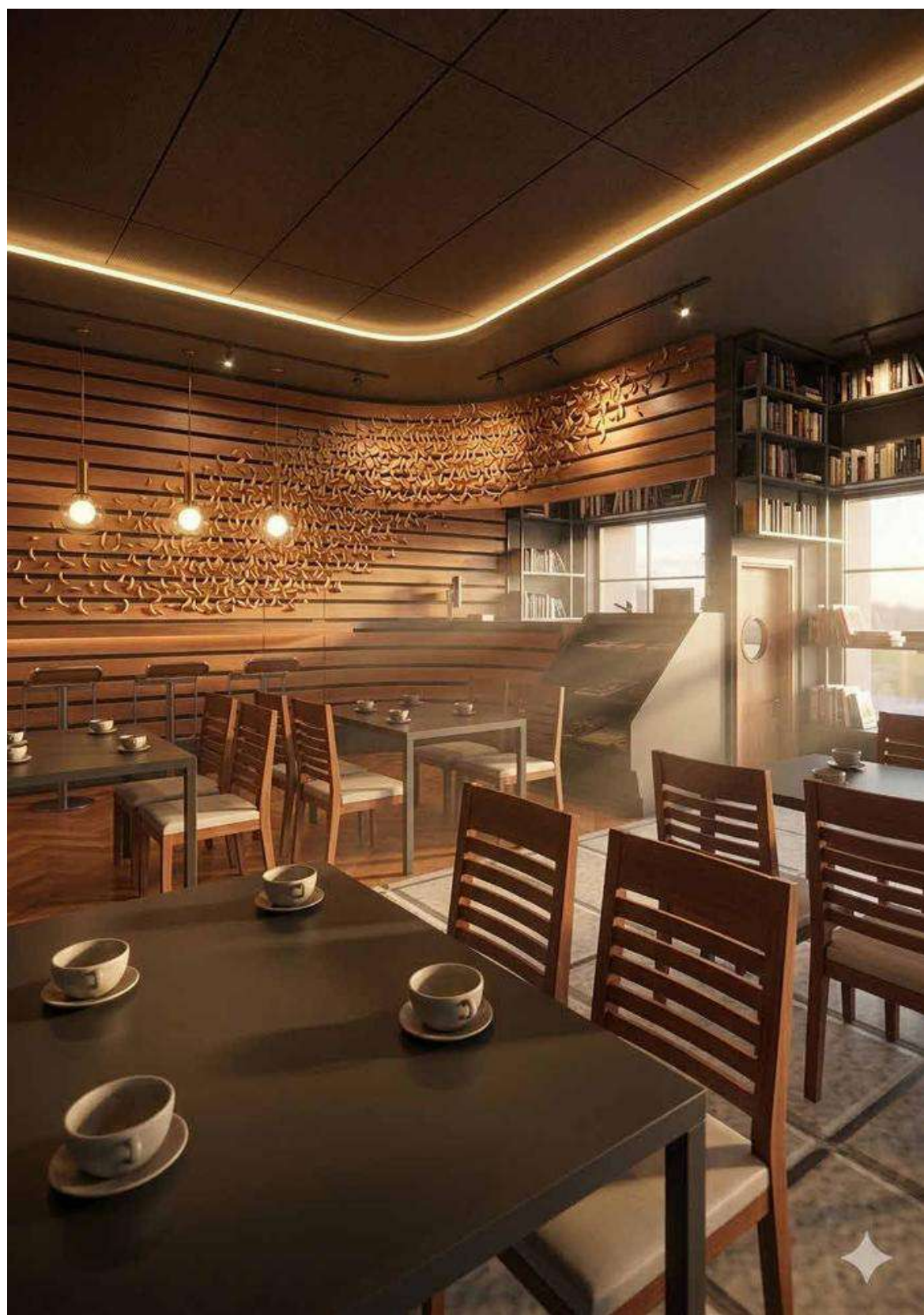
K	KITCHEN	GROUND FLOOR		UP	INT
	DOOR PANEL AND FINISH				
	2400 X 1800 X 50MM MILD STEEL LOUVERED DOOR FRAMED ON A 100X50X4MM RHS WITH RODENT MESH				
	FINISH (INSIDE & OUTSIDE):				
	1 COAT TIMBER PRIMER & 2 COATS POLYURETHANE ENAMEL PAINT				
	DOOR FRAME AND FINISH				
	100X50X6MM THICK MILD STEEL RHS FRAME FIXED TO WALL COMPLETE WITH 4NO. 25X1.2MMX200MM LONG MS BRACKETS ANCHORS ON EACH SIDE				
	FINISH: 1 COAT STEEL PRIMER & 2 COATS GLOSS ENAMEL PAINT				



L	SERVICES DOOR	GROUND FLOOR	QTY	UNIT
	DOOR PANEL AND FINISH			
	2400 X 900 X 50MM MILD STEEL LOUVERED DOOR FRAMED ON A 100X50X4MM RHS WITH RODENT MESH			
	FINISH (INSIDE & OUTSIDE): 1 COAT TIMBER PRIMER & 2 COATS POLYURETHANE ENAMEL PAINT			
	DOOR FRAME AND FINISH			
	100X50X6MM THICK MILD STEEL RHS FRAME FIXED TO WALL COMPLETE WITH 4NO. 25X1.2MMX200MM LONG MS BRACKETS ANCHORS ON EACH SIDE			
	FINISH: 1 COAT STEEL PRIMER & 2 COATS GLOSS ENAMEL PAINT			

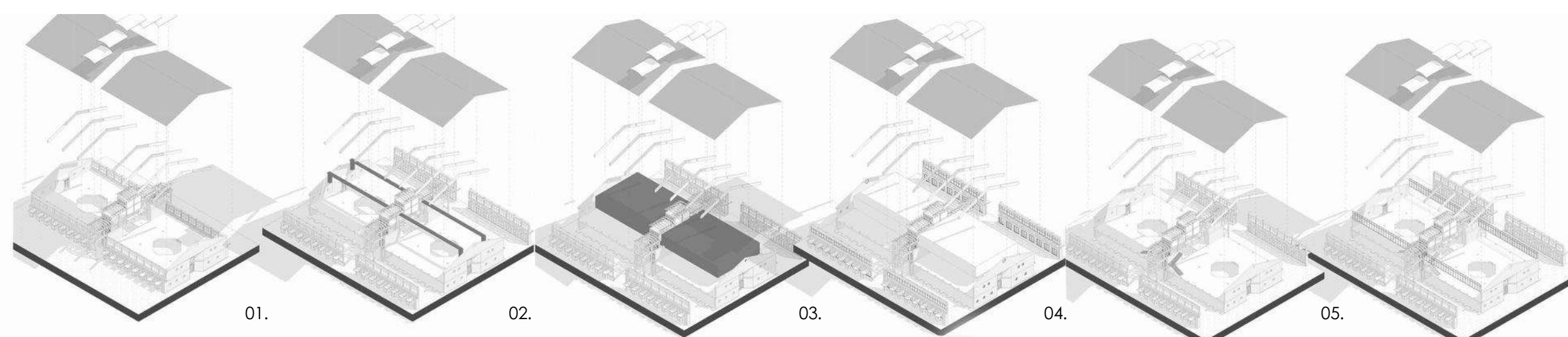


CONSERV REPORT.

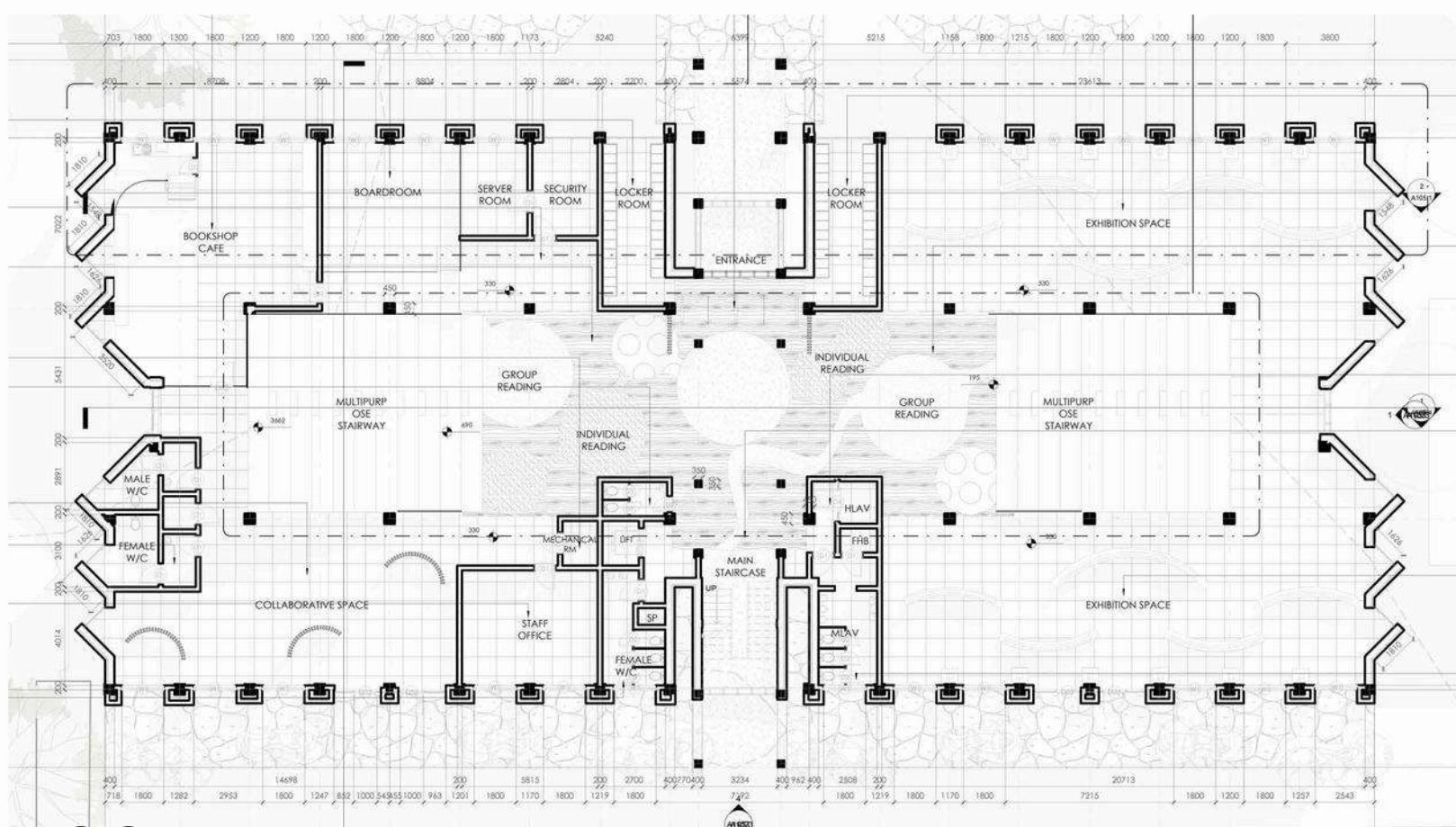


THE PROPOSED INTERVENTIONS FOR THE HISTORIC LIBRARY ARE UNDERPINNED BY A SENSITIVE, INTEGRATED, AND HERITAGE-LED APPROACH THAT CAREFULLY BALANCES THE PRESERVATION AND ENHANCEMENT OF ITS ARCHITECTURAL, HISTORICAL, AND CULTURAL SIGNIFICANCE WITH SUBSTANTIAL IMPROVEMENTS IN ENVIRONMENTAL PERFORMANCE AND UNIVERSAL ACCESSIBILITY. CENTRAL TO THIS VISION IS THE ENVIRONMENTAL RETROFIT STRATEGY, WHICH FOLLOWS A ROBUST FABRIC-FIRST METHODOLOGY. THIS INCORPORATES PASSIVE DESIGN PRINCIPLES SUCH AS OPTIMISED NATURAL VENTILATION THROUGH STRATEGIC STACK-EFFECT ENHANCEMENTS, CROSS-VENTILATION, AND NIGHT-TIME PURGING, ALONGSIDE ADVANCED DAYLIGHTING STRATEGIES INCLUDING LIGHT REDIRECTION TECHNIQUES AND SELECTIVE GLAZING TREATMENTS. REVERSIBLE AND DISCREET UPGRADES INCLUDE SECONDARY GLAZING SYSTEMS, TARGETED THERMAL INSULATION IN ROOF VOIDS AND NON-SIGNIFICANT FLOOR AREAS, HIGH-PERFORMANCE AIRTIGHTNESS MEASURES, ENERGY-EFFICIENT LED LIGHTING WITH INTELLIGENT OCCUPANCY AND DAYLIGHT-LINKED CONTROLS, AND THE POTENTIAL INTEGRATION OF APPROPRIATELY SITED RENEWABLE TECHNOLOGIES SUCH AS ROOF-MOUNTED PHOTOVOLTAICS. THESE MEASURES ARE PROJECTED TO DELIVER SIGNIFICANT REDUCTIONS IN OPERATIONAL ENERGY CONSUMPTION AND CARBON EMISSIONS, RESULTING IN SUBSTANTIAL LONG-TERM COST SAVING ON ELECTRICITY BILLS WHILE GENERATING ADDITIONAL INCOME THROUGH THE EXPORT OF SURPLUS RENEWABLE ENERGY TO THE GRID. COMPLEMENTING THE ENVIRONMENTAL UPGRADES, THE ACCESSIBILITY INTEGRATION STRATEGY IS GROUNDED IN UNIVERSAL DESIGN PRINCIPLES TO CREATE AN INCLUSIVE ENVIRONMENT THAT COMPLIES WITH THE EQUALITY ACT, BUILDING REGULATIONS PART M, AND BEST-PRACTICE STANDARDS SUCH AS BS 8300. KEY INTERVENTIONS COMPRISE CAREFULLY LOCATED RAMPS AND PLATFORM LIFTS, AUTOMATIC ENTRANCE DOORS, WIDENED CIRCULATION ROUTES, TACTILE PAVING AND WAYFINDING SYSTEMS, HEARING INDUCTION LOOPS, HIGH-CONTRAST SIGNAGE WITH BRAILLE INTEGRATION, ADJUSTABLE INCLUSIVE FURNITURE, AND SENSORY-CONSIDERATE LIGHTING AND ACOUSTIC TREATMENTS. ALL ACCESSIBILITY ENHANCEMENTS ARE POSITIONED AND DETAILED IN AREAS OF LESSER HERITAGE SIGNIFICANCE USING MATERIALS AND DETAILING THAT ARE FULLY REVERSIBLE AND VISUALLY SYMPATHETIC TO THE ORIGINAL ARCHITECTURE. THROUGH A DETAILED IMPACT ASSESSMENT MATRIX, RIGOROUS JUSTIFICATION OF INTERVENTIONS, AND A PHASED IMPLEMENTATION PROGRAMME, THESE STRATEGIES ENSURE THAT ENVIRONMENTAL SUSTAINABILITY AND ACCESSIBILITY IMPROVEMENTS NOT ONLY SAFEGUARD THE LIBRARY'S LONG-TERM VIABILITY AND RESILIENCE BUT ACTIVELY ENHANCE ITS ROLE AS A VIBRANT, INCLUSIVE, AND FINANCIALLY SUSTAINABLE COMMUNITY ASSET WITHOUT COMPROMISING ITS INTRINSIC HERITAGE VALUE.

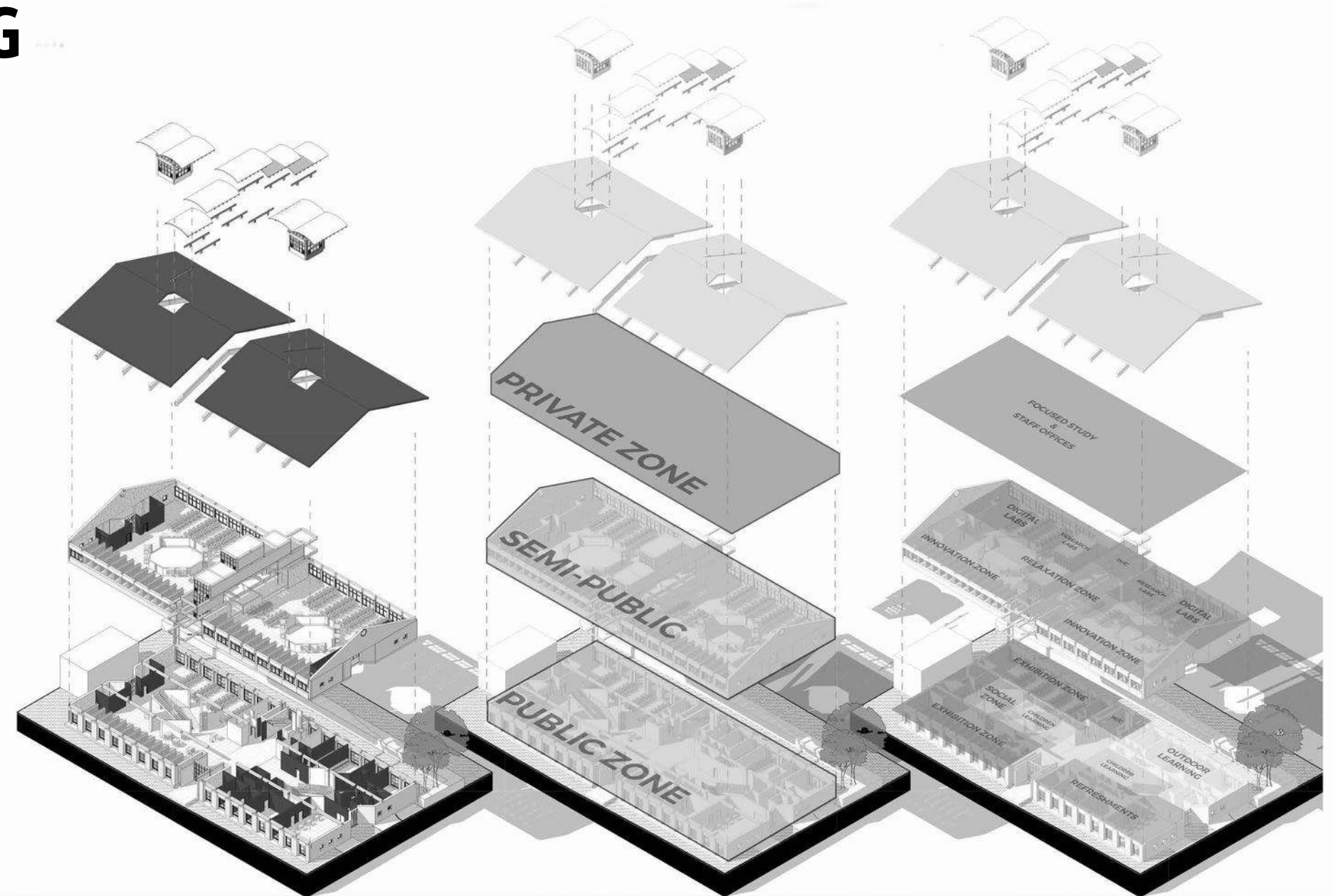
CONCEPT



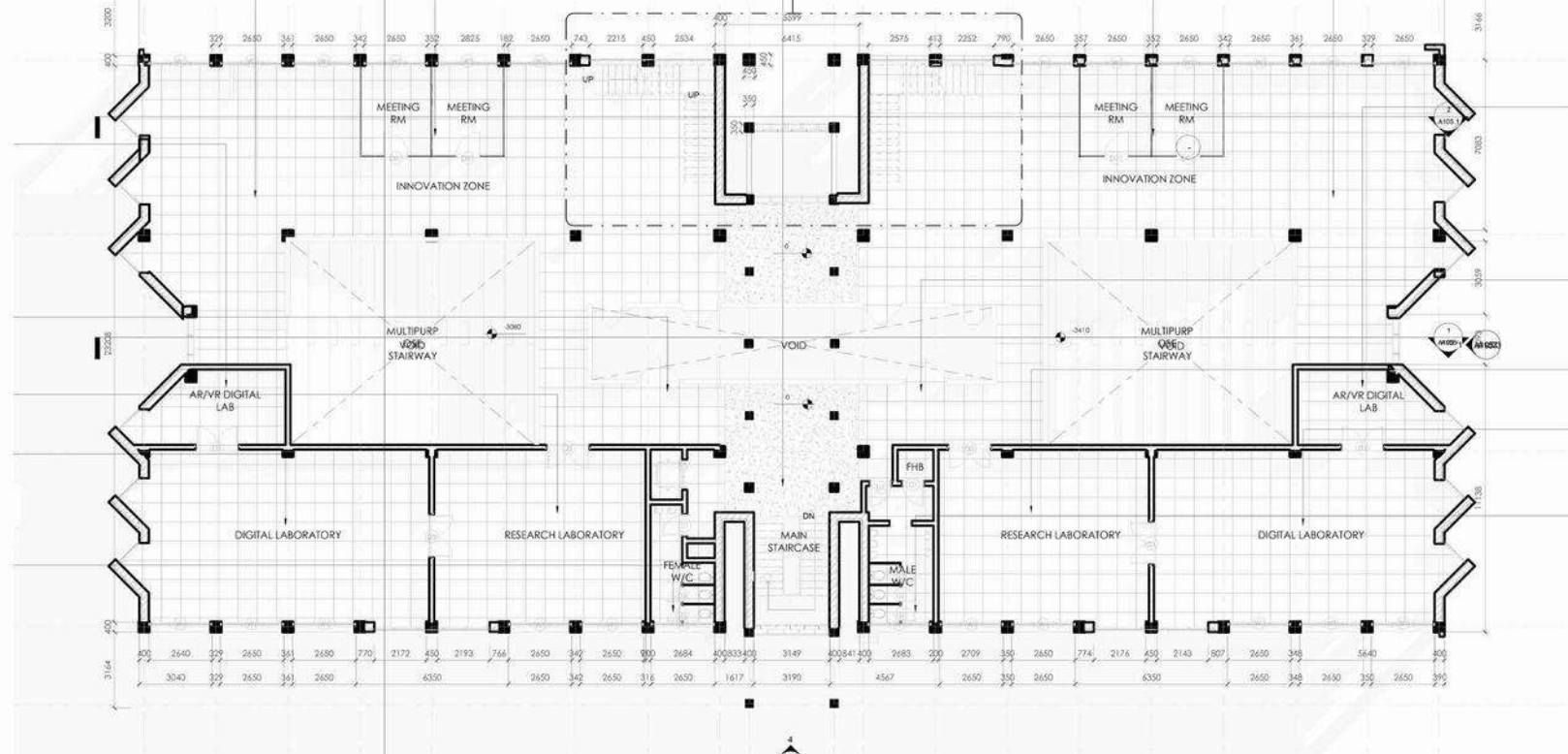
GROUND FLOOR



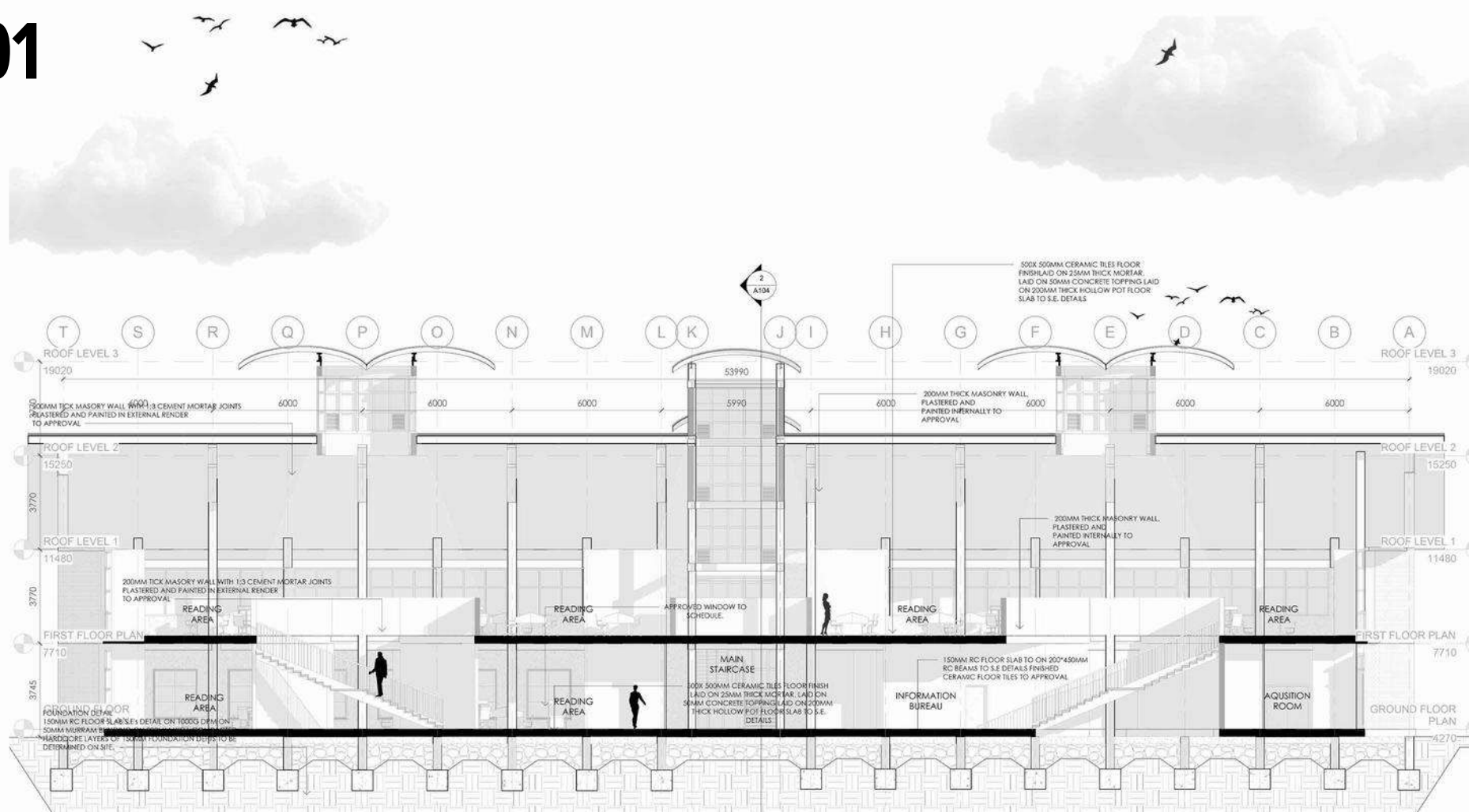
ZONING



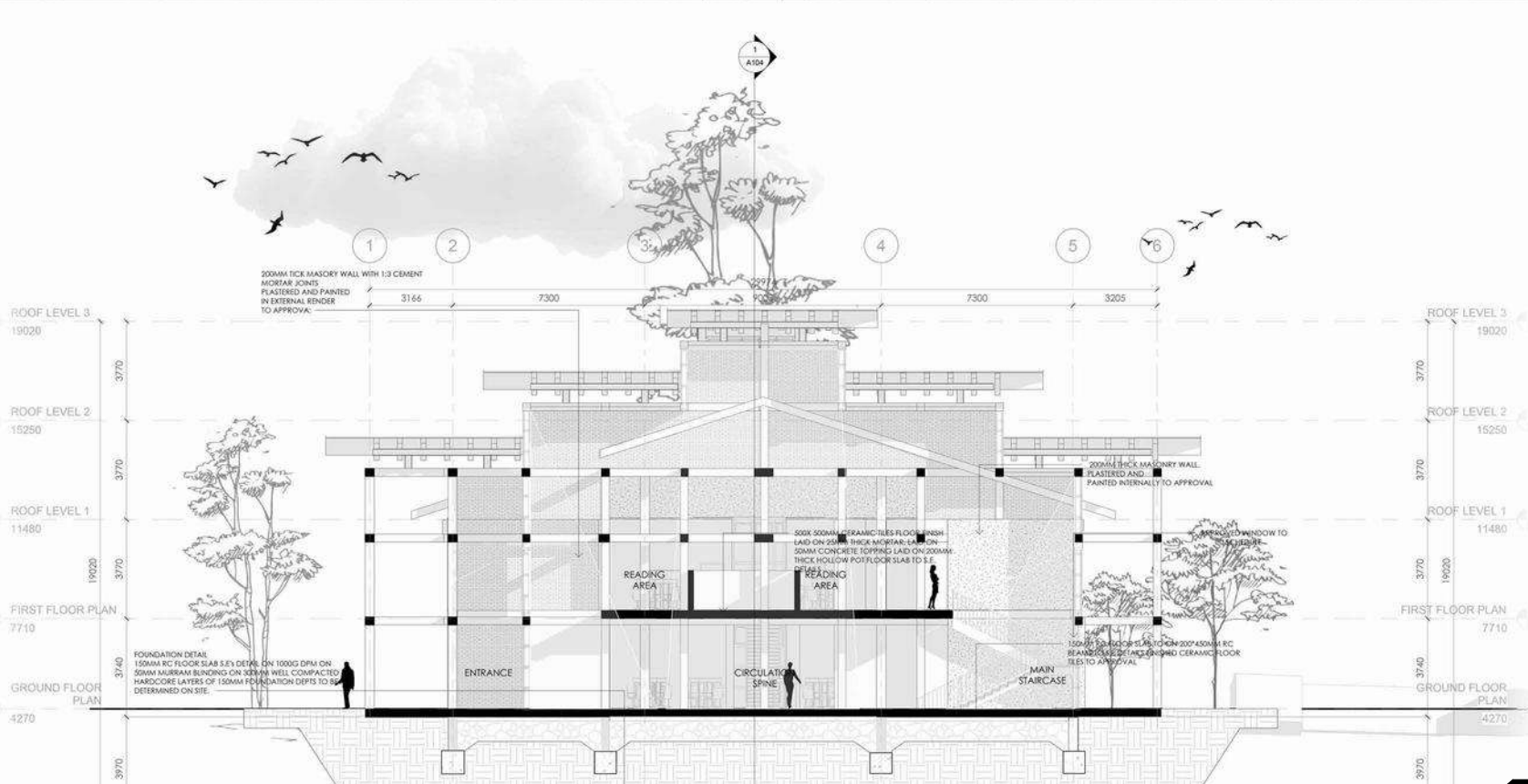
FIRST FLOOR



S-01



S-02



ABS211-0413/2022

OBUYA ACHIENG

CONSERVATION - JKUAT LIBRARY

EXTERIOR PROMPT



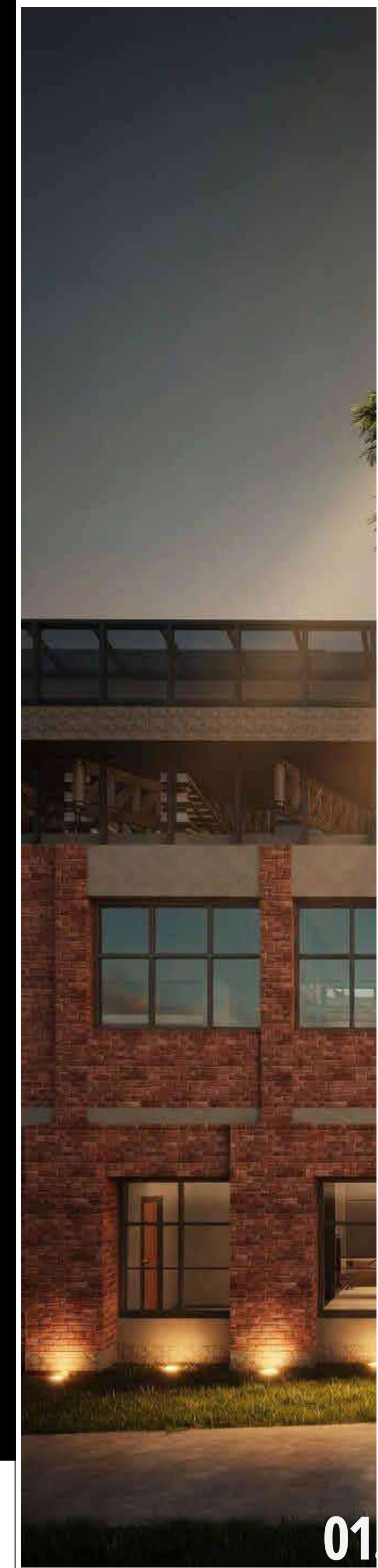
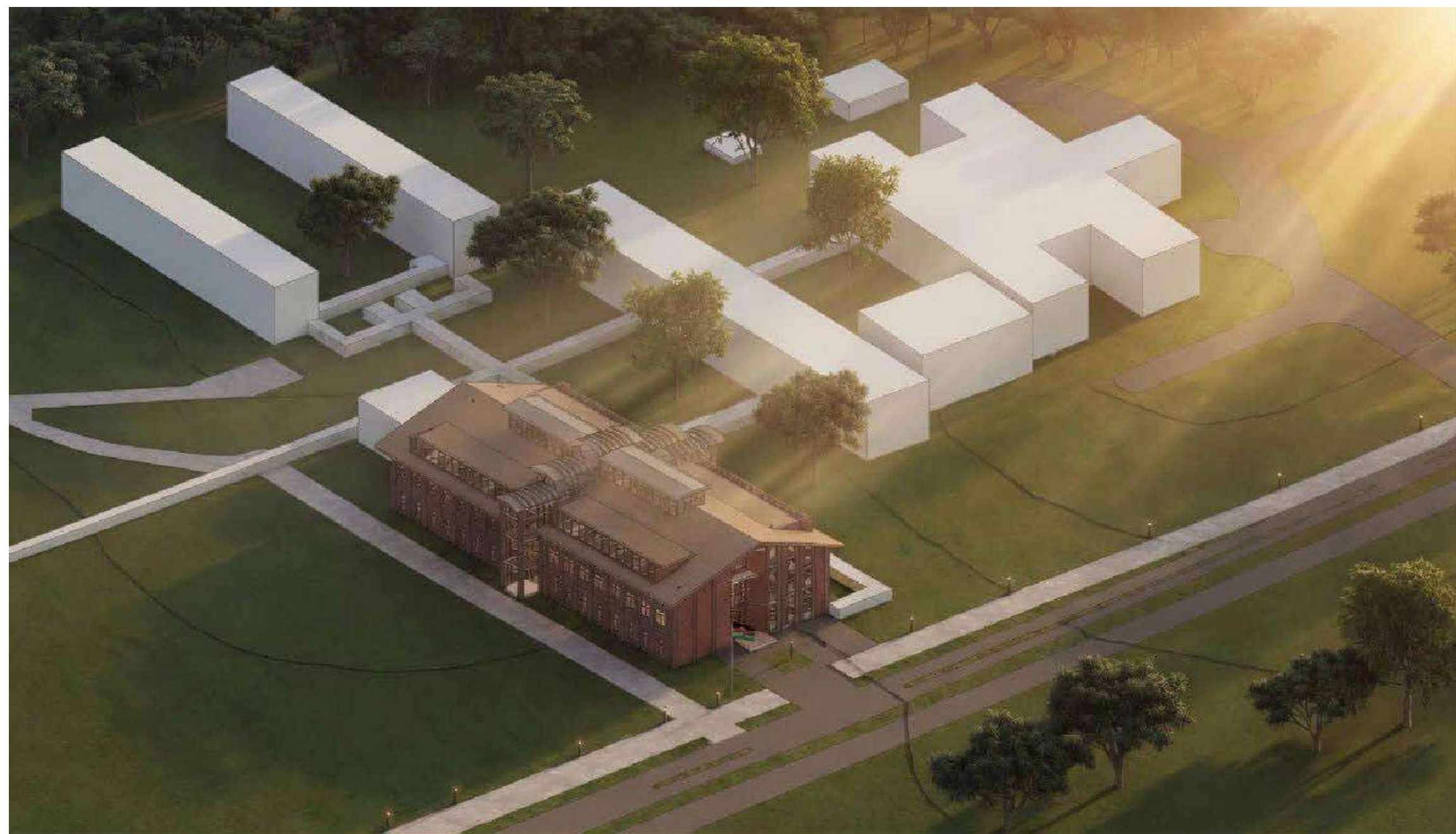
JKUAT LIBRARY

THE JKUAT LIBRARY STANDS AS A CONTEMPORARY ARCHITECTURAL LANDMARK ON THE JUJA CAMPUS, EMBODYING A THOUGHTFUL FUSION OF ROBUST MATERIALITY AND MODERN TRANSPARENCY. THE BUILDING'S PRIMARY FACADE FEATURES RICH RED BRICK MASONRY WITH DEEP TEXTURE AND TONAL VARIATION, ELEGANTLY CONTRASTED BY CLEAN HORIZONTAL CONCRETE BANDS AND EXPANSIVE HIGH-PERFORMANCE GLAZED CURTAIN WALLS THAT ALLOW ABUNDANT NATURAL LIGHT WHILE PROVIDING DRAMATIC REFLECTIONS OF THE SKY AND SURROUNDING LANDSCAPE.

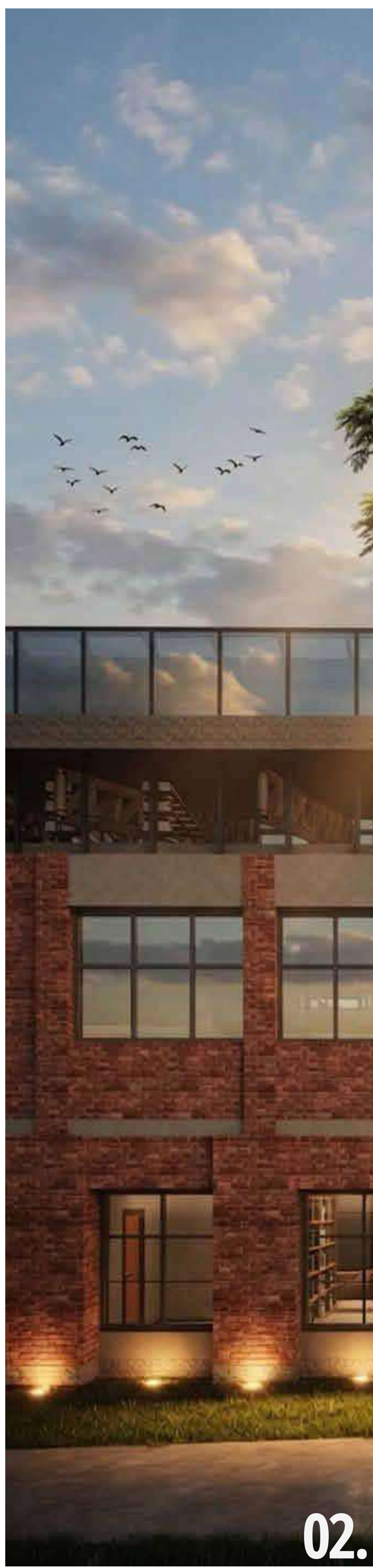
STRATEGIC LIGHTING PLAYS A PIVOTAL ROLE IN THE DESIGN: WARM GOLDEN-HOUR SUNLIGHT WITH RADIANT GOD RAYS DRAMATICALLY SCULPTS THE BUILDING'S MASSING AND CREATES DEPTH ACROSS THE FACADES, WHILE SUBTLE YET EFFECTIVE GROUND UPLIGHTS ACCENTUATE THE BRICKWORK AND BASE OF THE BUILDING DURING EVENING HOURS, ENHANCING ITS WELCOMING PRESENCE. THE ROOF FORM, INCORPORATING DISTINCTIVE OVERHANGS AND CLERESTORY ELEMENTS, CONTRIBUTES TO BOTH AESTHETIC INTEREST AND FUNCTIONAL DAYLIGHTING.

CAREFULLY SELECTED MATURE CONTEXTUAL TREES AND LUSH BIOPHILIC LANDSCAPING ENVELOP THE STRUCTURE, STRENGTHENING THE CONNECTION BETWEEN THE BUILDING AND THE KENYAN NATURAL ENVIRONMENT. FROM THE AERIAL PERSPECTIVE, THE LIBRARY SERVES AS THE HEART OF A LARGER CAMPUS COMPOSITION, ANCHORED BY INTERCONNECTED WHITE ACADEMIC BLOCKS, GENEROUS GREEN OPEN SPACES, FORMAL PATHWAYS, AND A PROMINENT GRADUATION SQUARE DIRECTLY IN FRONT OF THE MAIN ENTRANCE.

THIS PROJECT PRIORITIZES DURABILITY, ENVIRONMENTAL RESPONSIVENESS, AND USER COMFORT THROUGH GENEROUS DOUBLE-HEIGHT INTERIOR VOLUMES, OPTIMIZED FENESTRATION, AND FLEXIBLE COLLABORATIVE SPACES. THE OVERALL DESIGN CREATES AN INSPIRING, INCLUSIVE, AND SUSTAINABLE ACADEMIC ENVIRONMENT THAT WILL FOSTER RESEARCH, INNOVATION, LEARNING, AND COMMUNITY ENGAGEMENT FOR CURRENT AND FUTURE GENERATIONS OF JKUAT STUDENTS AND FACULTY.



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02.



03.



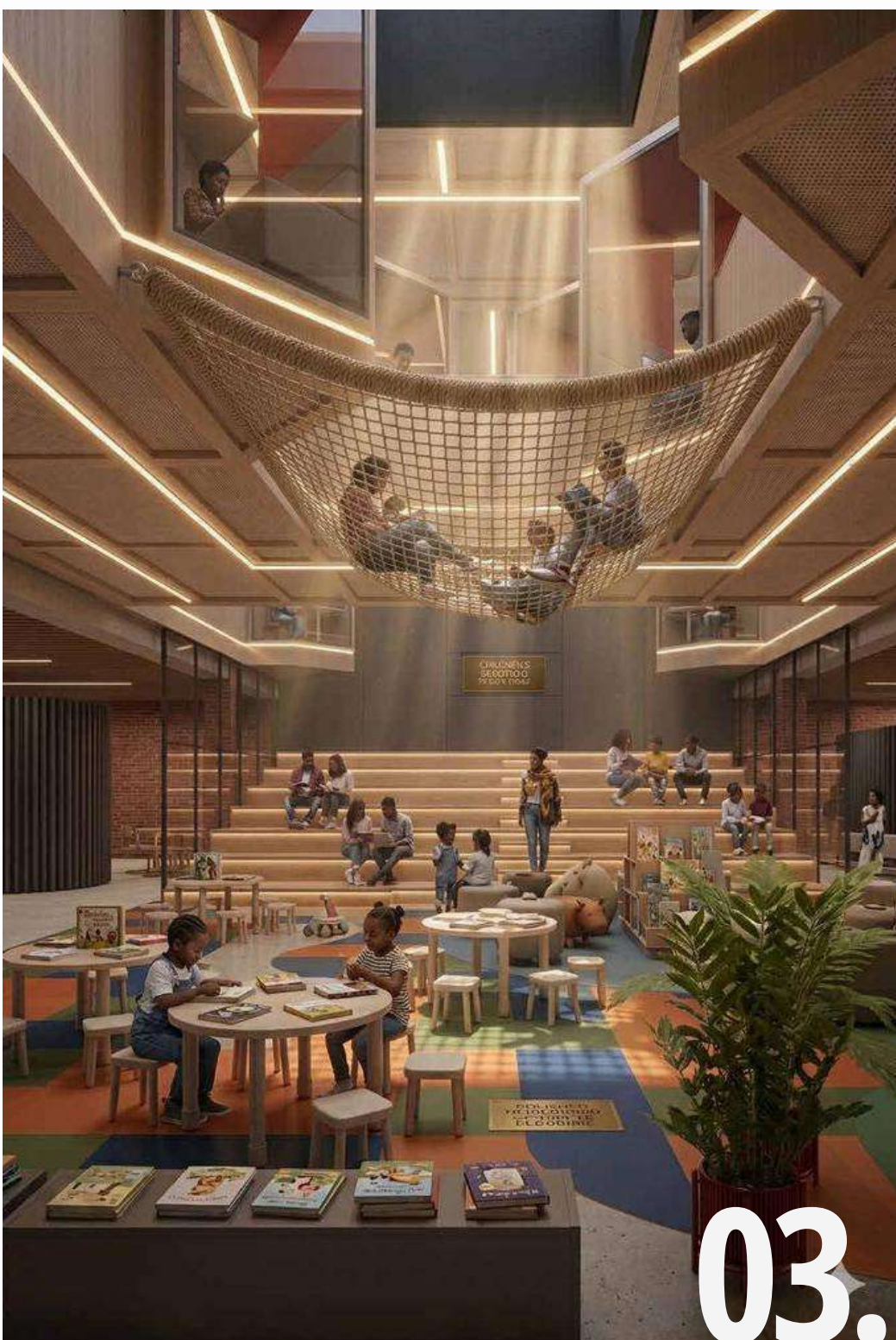
ABS211-0413/2022

OBUYA ACHIENG

CONSERVATION - JKUAT LIBRARY

INTERIOR PROMPT

01.

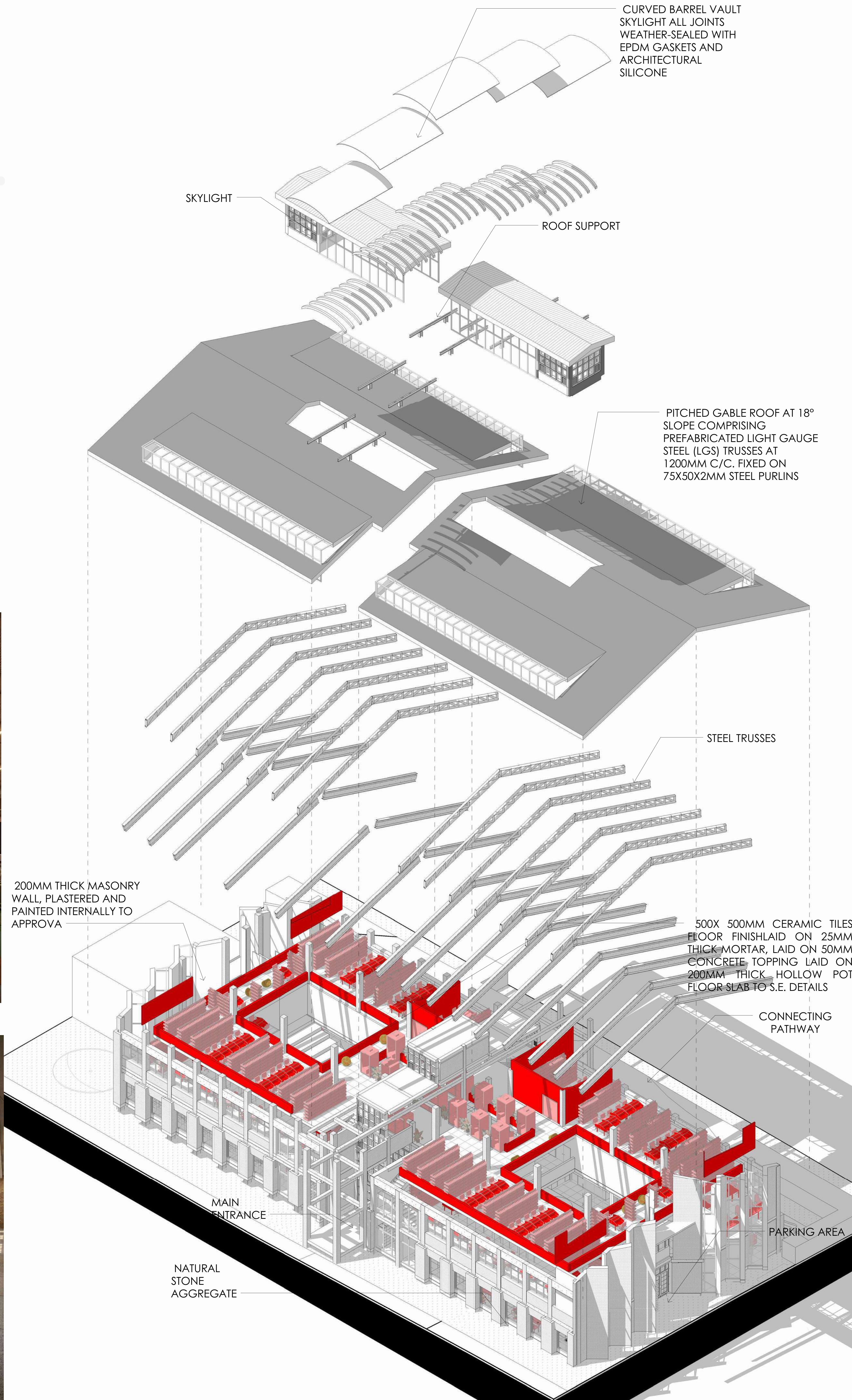


THE LIBRARY CAFÉ: GF
A Hospitality-Driven Entrance
The design of the Library Café is rooted in the concept of "executive scholarship," moving away from the sterile atmosphere of traditional campus cafés towards a sophisticated, hospitality-grade environment. By integrating rich timber-slatted wall treatments and a warm, layered lighting scheme—featuring both recessed linear LEDs and curated globe pendants—the space establishes an immediate sense of quality and professional prestige. The atmospheric "golden hour" light filtering from the window creates a welcoming, expansive feel that encourages long-term occupancy and social networking, while the seamless integration of bookshelves ensures that the core identity of the library remains the focal point of the dining experience. The Collaborative Study Hub: Tectonic Warmth and Natural Light

THE COLLABORATIVE ZONE: GF
This collaborative zone serves as a strategic "lung" for the library, prioritizing user well-being through an industrial-warm aesthetic and a strong connection to the Kenyan landscape. The material palette creates a deliberate dialogue between the raw, tactile texture of realistic brickwork and the refined, vertical rhythm of warm wood-slat columns, effectively humanizing the building's structural grid. A custom coffered ceiling system provides soft, indirect illumination that complements the dramatic "god rays" streaming through the large-format windows, which reveal contextual greenery. This high-contrast interplay of shadow and light, paired with the mildly reflective flooring, elevates the space from a functional thoroughfare to a premium architectural destination for peer-to-peer learning.

THE ACTIVATED VERTICALITY AND COMMUNITY: GF
The central atrium is reimagined as a dynamic "Town Square," where vertical circulation is transformed into a tiered, multipurpose study landscape that caters to the diverse JKUAT community. This section demonstrates a sophisticated multi-material approach, balancing the warmth of acoustic timber baffles with the clean, modern lines of reinforced concrete and gallery-white structural beams. By populating the bleachers and study pods with African figures, the render emphasizes a sense of ownership and inclusivity, portraying the library as a vibrant social asset. The inclusion of a playful rope-net reading zone suspended within the void further activates the volume, turning an empty architectural space into a kinetic, high-engagement zone for students to study, relax, and observe the library's internal life.

THE EXHIBITION SPACE: GF
Designed as a sophisticated platform for academic and artistic curation, this space features curved, illuminated partitions to create a fluid, intuitive path through architectural research and art displays. The integration of cove lighting along the top of the curved white display walls ensures that the posters and models are bathed in a soft, shadowless glow, emphasizing the detail of the work. This clean, modern intervention is contrasted against the tactile realism of the perimeter brick walls, which provide a rich, industrial backdrop for the displays. With a mildly glossy floor that catches the reflections of the Kenyan landscape through the windows, the space feels both rooted in its context and globally competitive, offering a professional setting for academic critiques and public showcases.



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