

Architectural Design Portfolio

FELIPE AMEZQUITA

P C R
T F U
L i C



CUBIERTA

Cubierta plana con en concreto, con luz cenital



CONTENT

P C R
T F U
L i C

01 Frutales Residential Condominium

Type: Residential Housing Complex
Location: Chía, Cundinamarca, Colombia
Timeline: 2017 – 2023
Role: Lead Architect & Project Director
Software: ArchiCAD, AutoCAD, Twinmotion

Frutales is a private residential condominium consisting of 28 two-story homes located on an 8,500 m² lot (approximately 91,493 ft²) in the town of Chía, north of Bogotá. Each home has a floor area of 162 m² (approximately 1,743 ft²) and was designed with bioclimatic strategies to optimize energy use, maximize passive heating, and enhance user comfort in a cold-climate region.

The architectural concept prioritized solar gain, spatial efficiency, and community interaction. Several units included customized design layouts in response to client needs, site conditions, and orientation. The project also included the full design of public spaces, vehicular access, internal roads, green areas, and shared social amenities.



ABOUT THE LOCATION – CHÍA, CUNDINAMARCA

Located just 30 kilometers north of Bogotá, Chía is a rapidly growing municipality within the metropolitan region of Colombia's capital. Known for its cool Andean climate, scenic mountain views, and increasing urban development, it has become a preferred area for residential and mixed-use projects. Its proximity to Bogotá makes it attractive for families seeking a suburban lifestyle with access to city infrastructure, while still enjoying open space, nature, and better air quality.



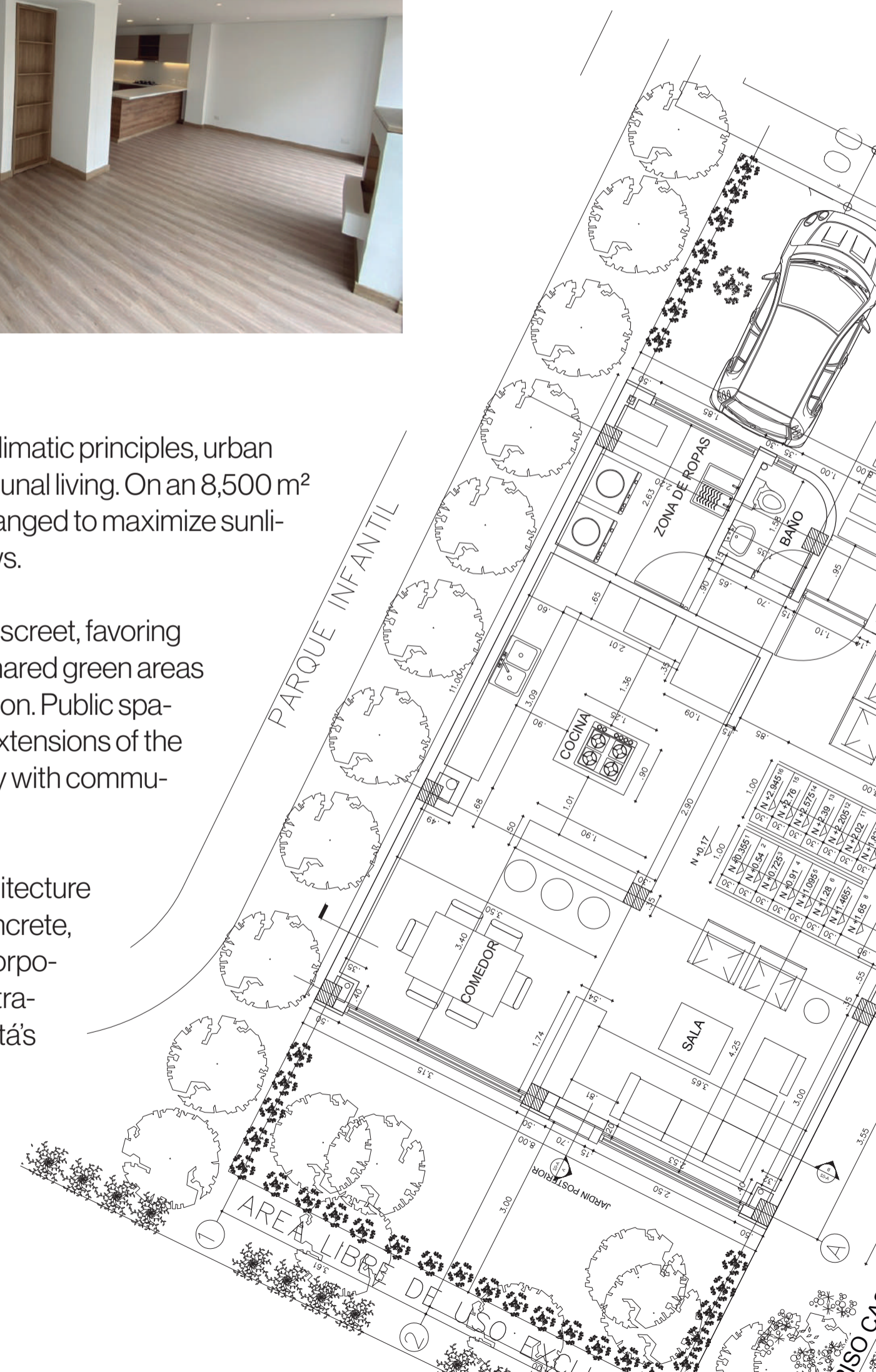
ARCHITECTURAL & URBAN DESIGN OVERVIEW



Design focused on bioclimatic principles, urban connectivity, and communal living. On an 8,500 m² site, 28 homes were arranged to maximize sunlight, ventilation, and views.

Vehicular access was discreet, favoring pedestrian paths and shared green areas that encourage interaction. Public spaces were designed as extensions of the homes, blending privacy with community life.

The contemporary architecture uses brick, exposed concrete, and natural finishes, incorporating passive heating strategies suitable for Bogotá's climate. Each house features two levels, with layouts adapted to site topography and user needs.



HOUSING DESIGN OVERVIEW

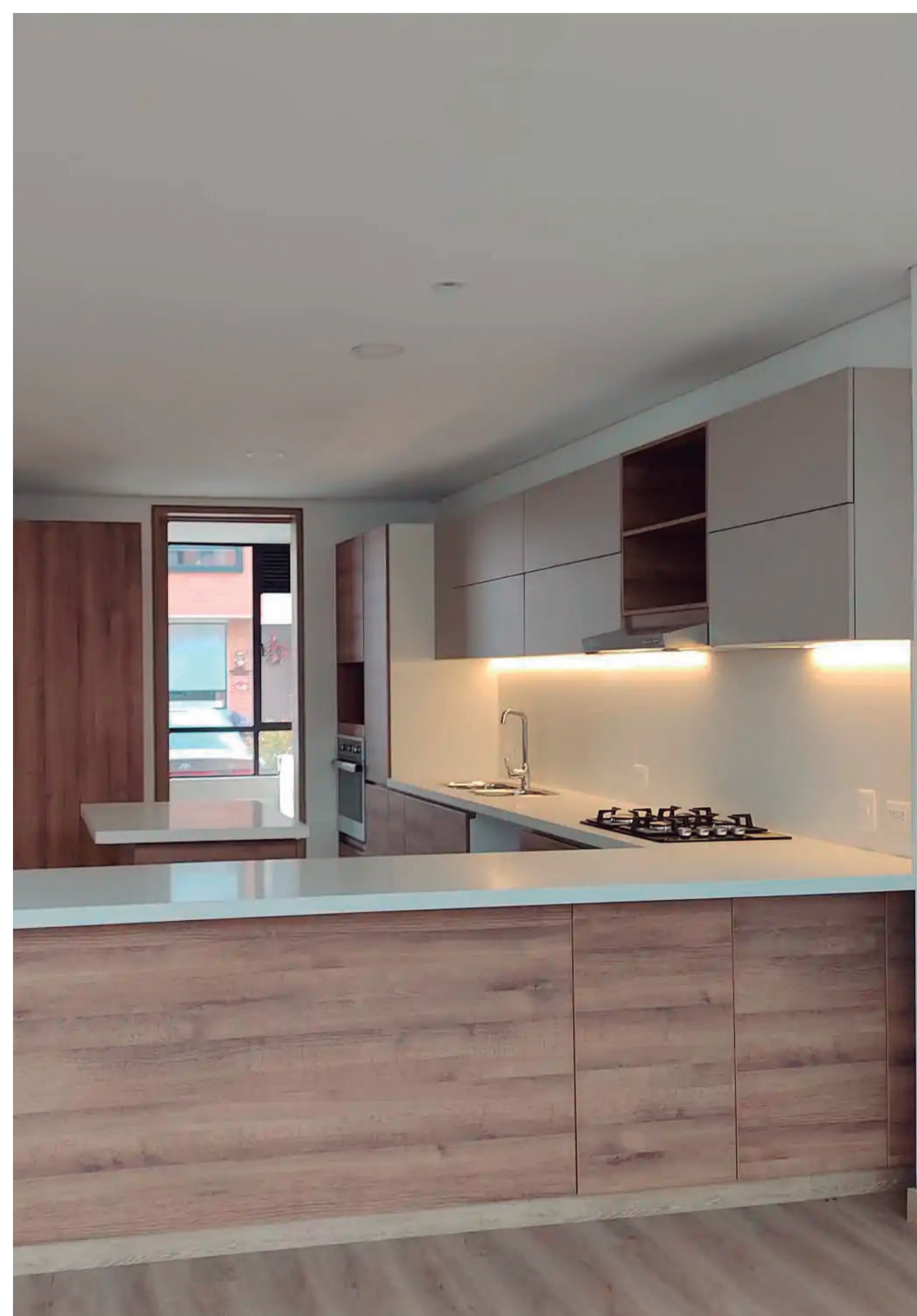
Each home in the Frutales condominium was designed as a two-story single-family residence with a built area of 162 m² (approx. 1,743 ft²), carefully configured to respond to both climatic performance and spatial quality. The design prioritizes thermal comfort in Bogotá's cold mountain climate through passive design strategies that reduce energy dependence and enhance interior livability.

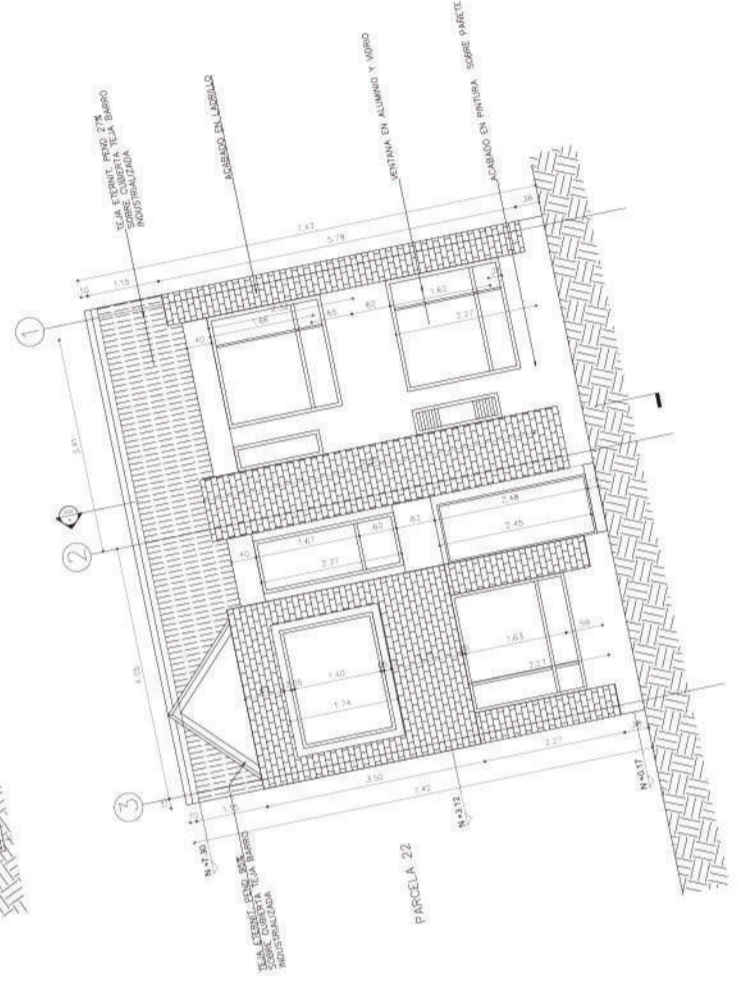
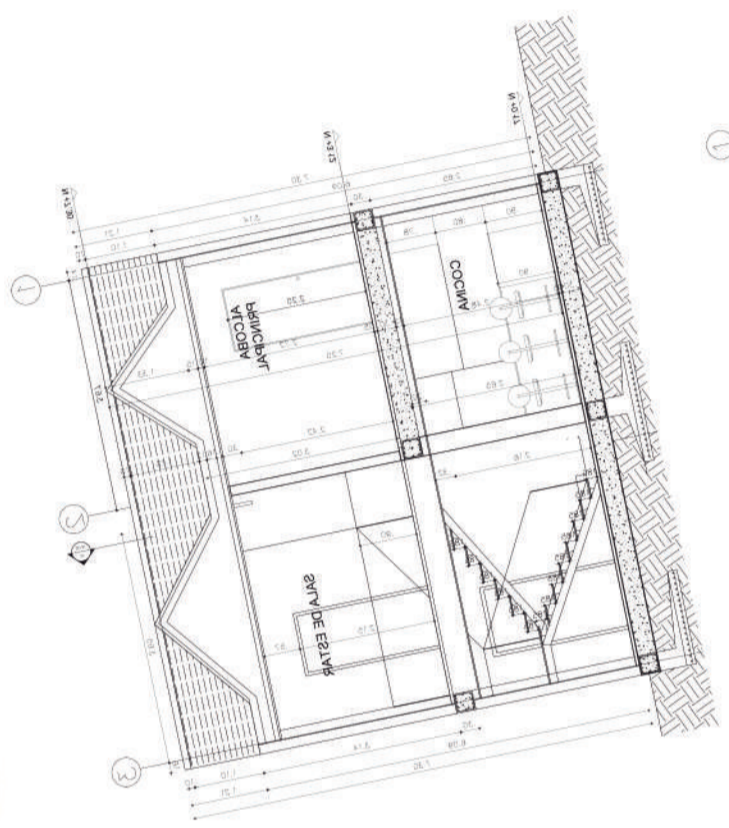
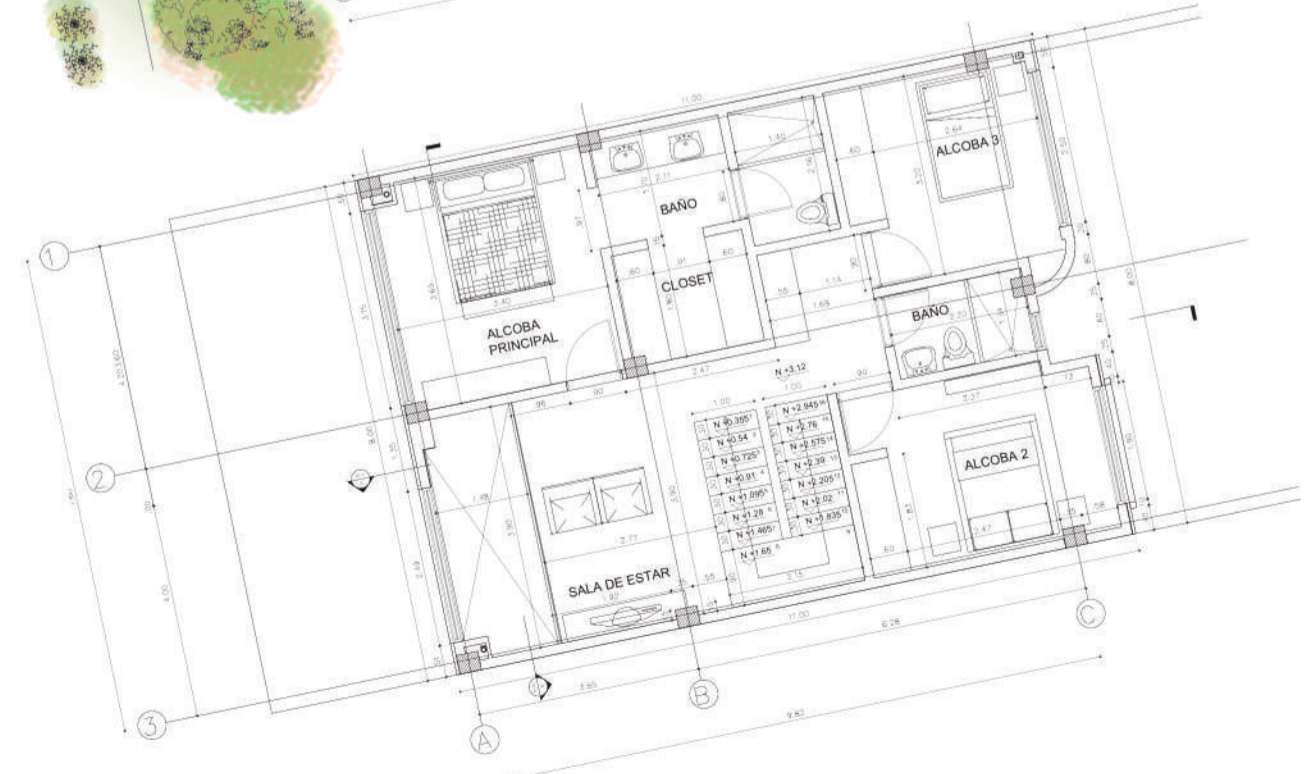
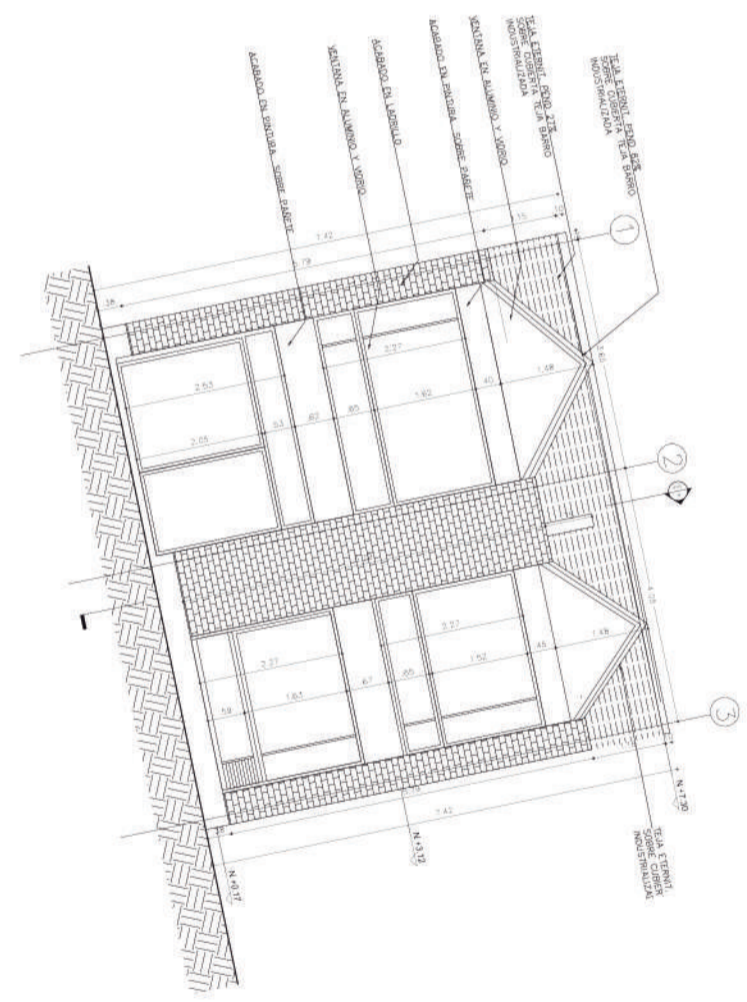
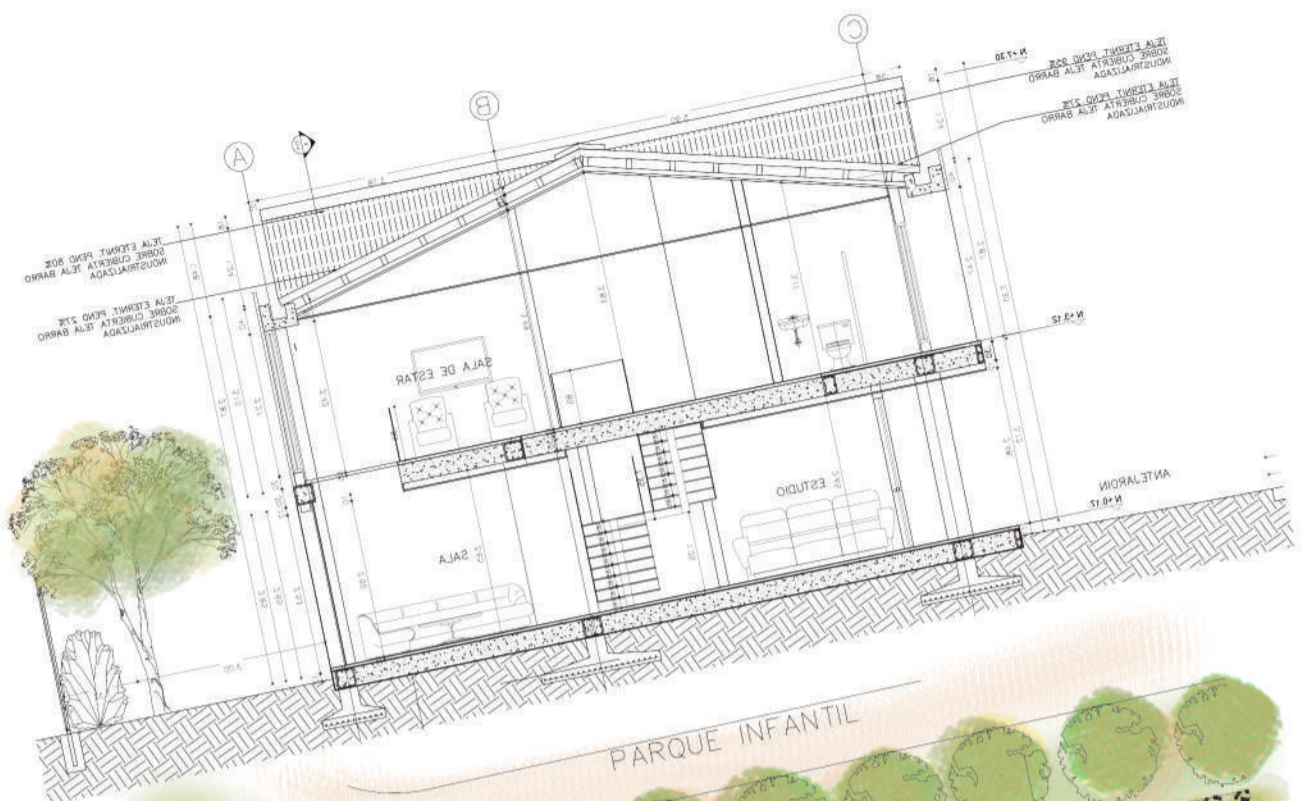
The first floor hosts public and service areas, including an open-concept living–dining space, kitchen, guest bathroom, utility room, and a covered parking area. These areas are visually connected to the exterior through large windows and sliding glass doors, maximizing natural light and facilitating thermal gain during daylight hours.

The second floor includes private spaces: two or three bedrooms, depending on the unit, with one being the master suite featuring an en-suite bathroom and walk-in closet. Circulation was minimized in favor of functional area distribution, ensuring privacy and acoustic separation between rooms.

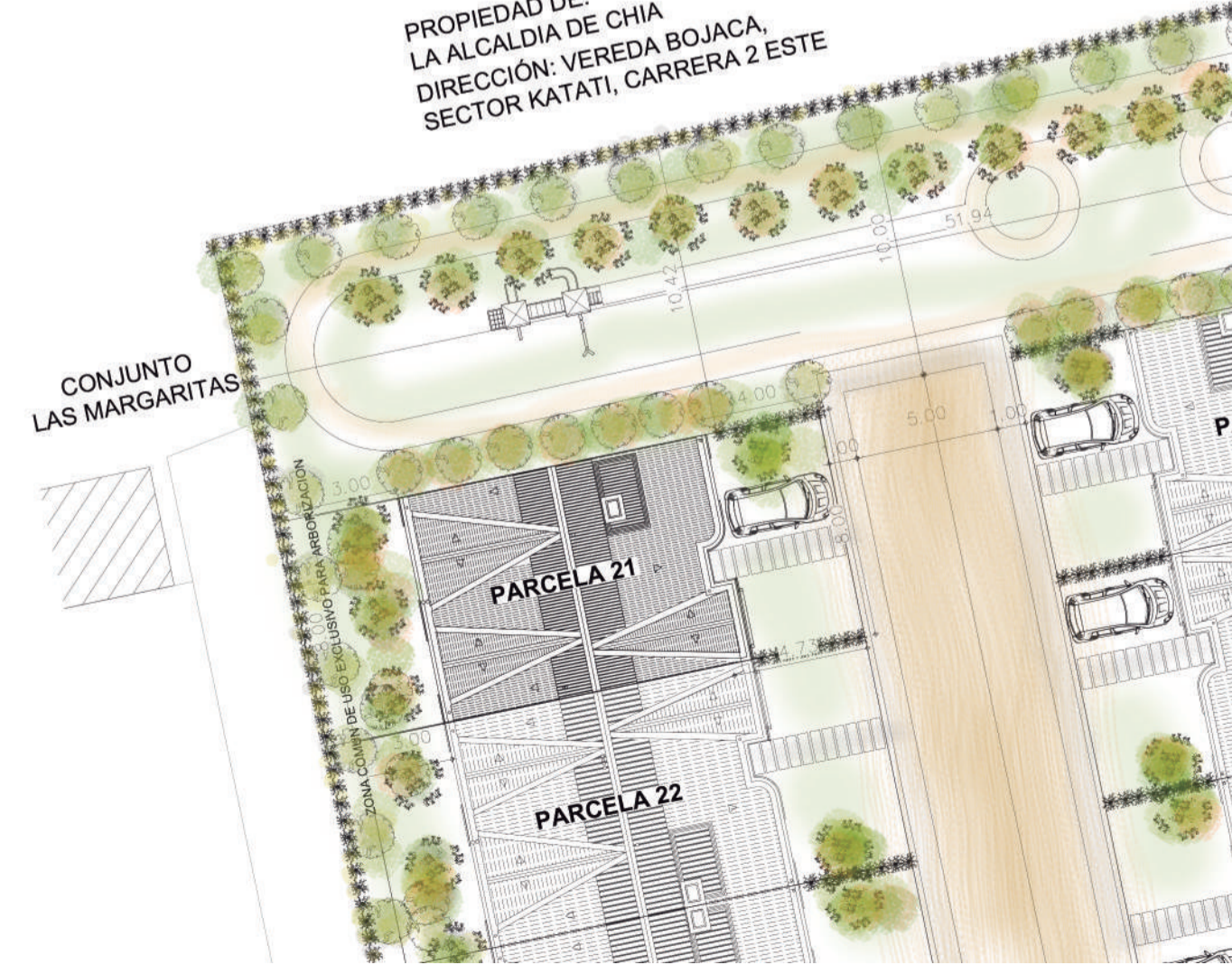
Each house includes high ceilings, optimized window orientation, and roof overhangs to balance solar heat gain and rain protection. The material palette combines brick, exposed concrete, smooth plaster, and natural wood accents, providing a timeless and warm contemporary aesthetic.

Certain units were modified in layout to adapt to site topography or meet custom client requests, ensuring a flexible yet cohesive architectural language across the development.





PROPIEDAD DE:
LA ALCALDIA DE CHIA
DIRECCIÓN: VEREDA BOJACA,
SECTOR KATATI, CARRERA 2 ESTE



Colibrí 02 Residential Towers

Type: Multifamily Residential

Location: Chía, Cundinamarca, Colombia

Year: 2020–2024

Role: Lead Designer & Project Coordinator

Tools: Revit, AutoCAD, Twinmotion

Colibrí is a residential complex consisting of two seven-story apartment towers with an underground parking level, designed in response to Bogotá's climate. The layout maximizes sunlight exposure from east to west, enhancing thermal comfort and natural lighting throughout the units. The apartments are tailored to market research and user data, ensuring both efficiency and livability.



PROJECT DESCRIPTION:

I led the architectural design and project coordination, managing BIM integration, technical documentation, and cross-discipline coordination with structural, electrical, and plumbing systems. The project includes full 3D modeling, photorealistic visualization, and detailed construction documentation.

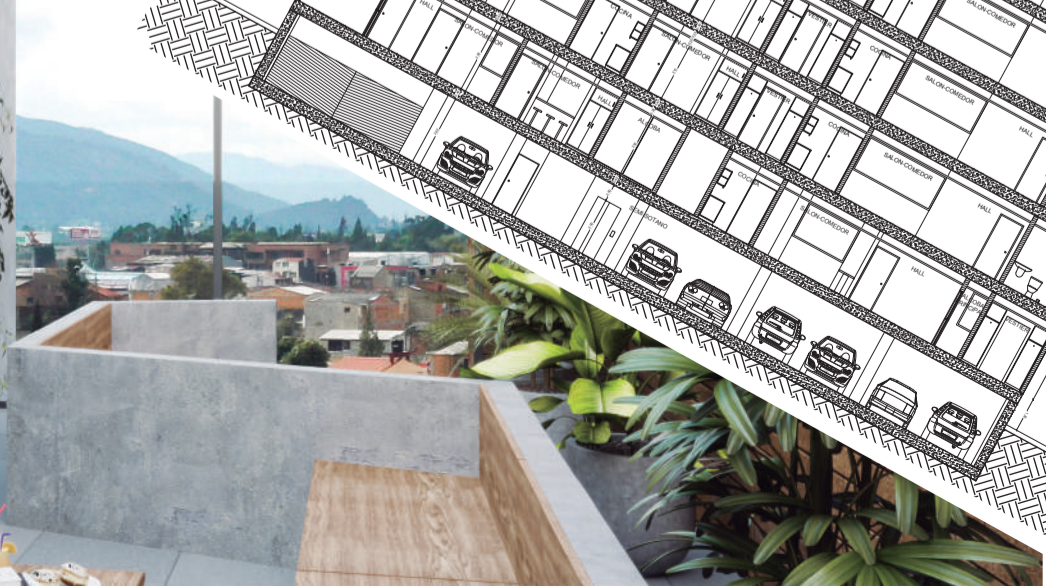
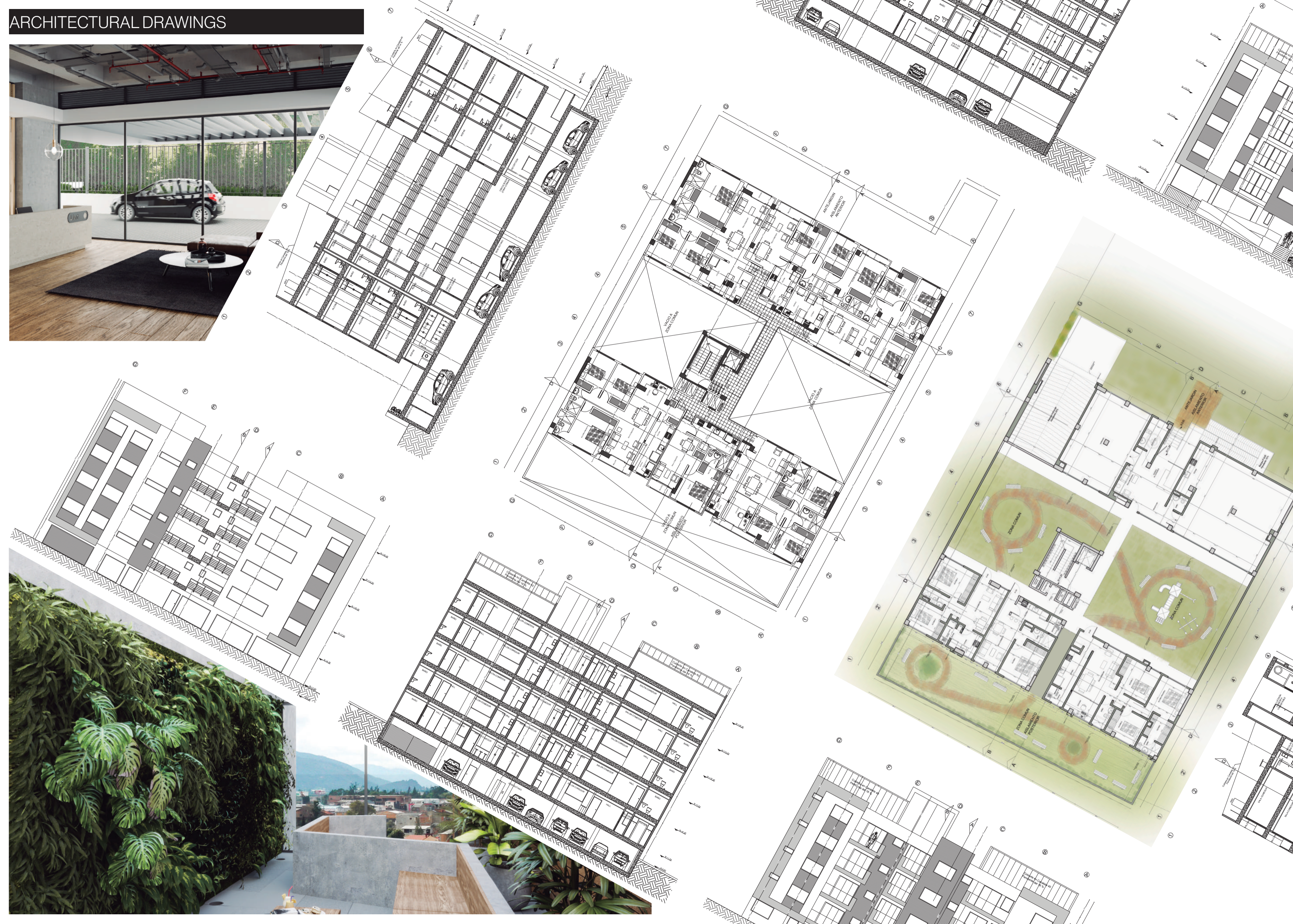
- Led the architectural design from concept to construction documentation, ensuring alignment with local regulations and user needs identified through market research.
- Developed the complete BIM model in Revit, integrating architectural, structural, and MEP elements for coordination and clash detection.
- Managed the technical documentation process, producing detailed plans, sections, and elevations for municipal approval and on-site execution.
- Orchestrated coordination meetings with engineers and consultants to align design intentions and resolve design conflicts early in the process.
- Optimized unit layouts for solar orientation (east–west) based on Bogotá's climatic conditions, improving thermal performance and energy efficiency.
- Produced high-quality visualizations using Twinmotion for presentations to stakeholders and early sales strategy.
- Ensured project milestones and deliverables were met on time through structured project management and continuous design reviews.

DELIVERABLES

- Full BIM model in Revit
- Construction drawings (architectural, MEP)
- Visualization renders with Twinmotion
- Coordination across disciplines for permit submission and technical review



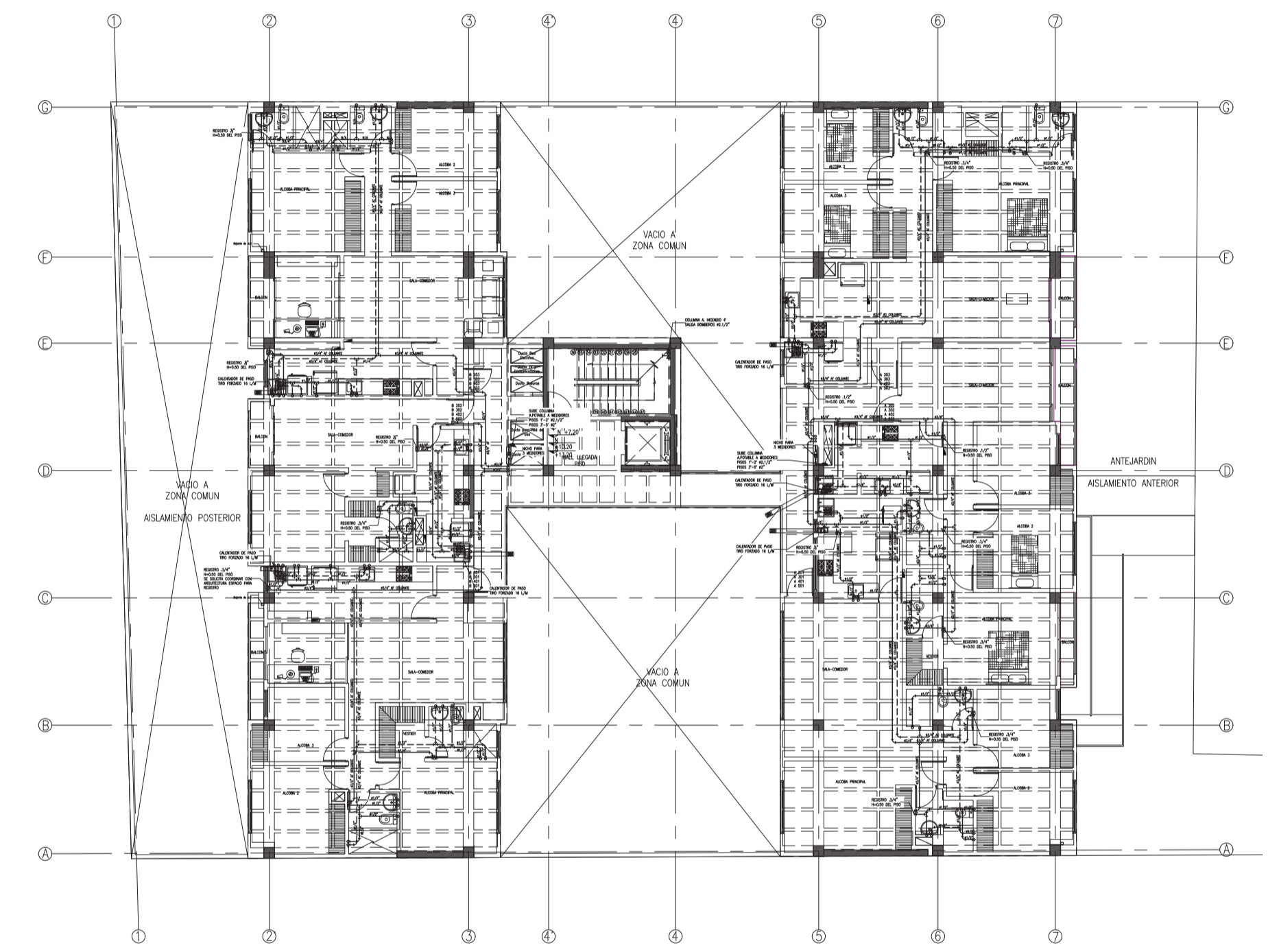
ARCHITECTURAL DRAWINGS





PLUMBING AND SANITARY PLANS

As part of the project coordination, I developed detailed plumbing and sanitary layout drawings, including cold and hot water distribution, drainage systems, and ventilation pipes. These plans were fully integrated into the BIM model in Revit, ensuring compatibility with architectural and structural elements. I coordinated with the MEP team to meet building codes and optimize the efficiency of the water systems.



03 Custom Brick House

Type: Single-Family Residential

Location: Vereda Fagua, Chía, Cundinamarca, Colombia

Year: 2024

Role: Lead Architect & Designer

Tools: Revit, AutoCAD, Twinmotion

This custom-designed single-family residence, located in the rural area of Fagua, Chía, was conceived to fully embrace its natural surroundings. Set on an open green lot, the two-story home was designed to maximize views, natural light, and indoor-outdoor connections. The architectural layout responds directly to the client's request for a clean, square design, while integrating contemporary elements like cantilevered balconies, skylights, and a full brick façade. The project balances simplicity with spatial richness, offering comfortable, climate-responsive living tailored to both the site and the client's vision.



PROJECT DESCRIPTION:

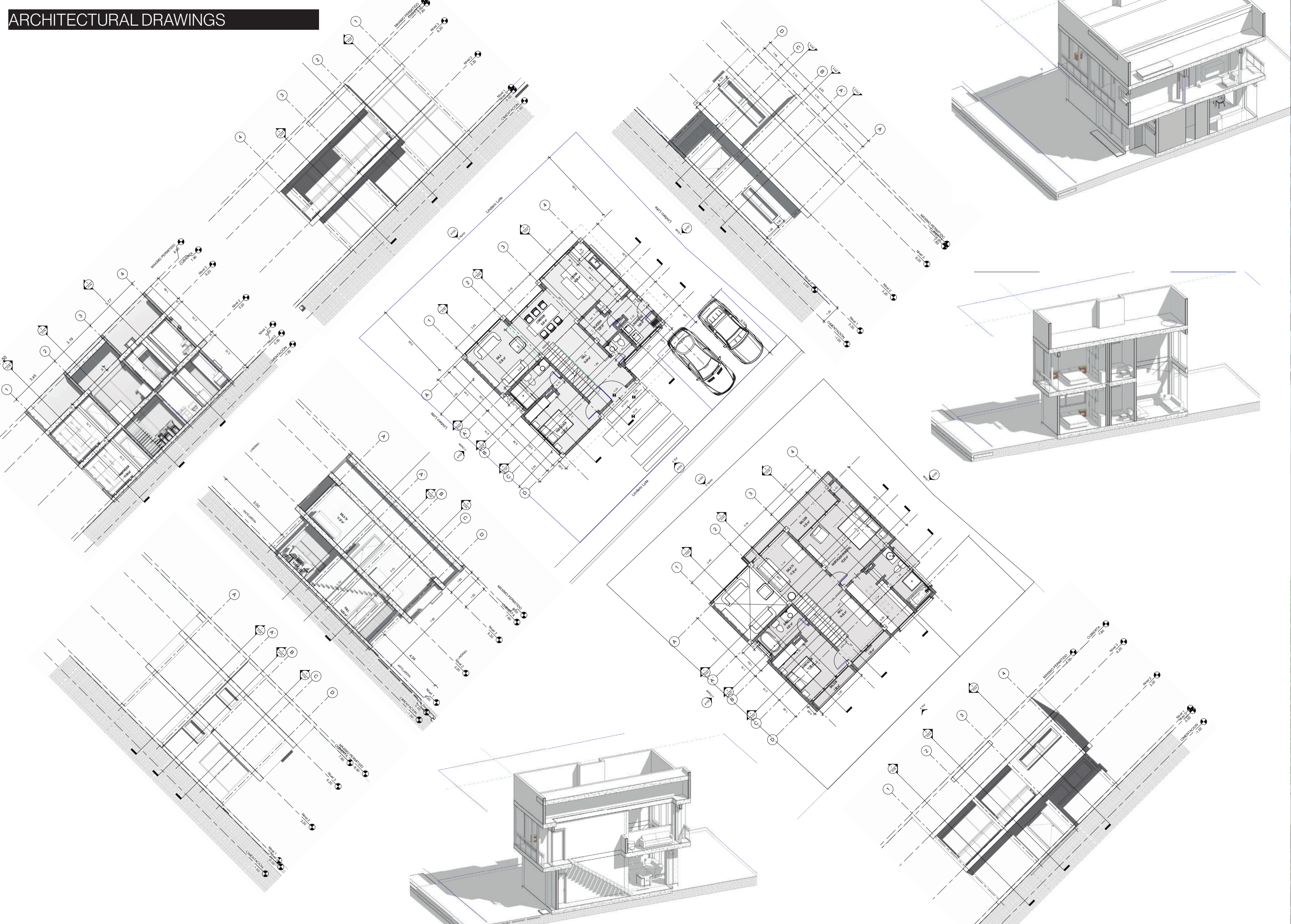
This 220 m² custom-designed two-story house is located on a greenfield lot surrounded by lush natural landscapes. The design focused on maximizing visual connection to nature through large windows, balconies, and voids that frame the outdoor scenery. The first floor includes a living room, dining area, kitchen, and guest bedroom with private bathroom, all connected to a large backyard with garden areas. The second floor features two bedrooms with private bathrooms, and a master suite with a large walk-in closet and bathroom, overlooking the double-height living room.

- Developed the architectural design based on the client's specific request for a modern square layout.
- Prioritized natural lighting through the use of skylights and large fenestrations oriented toward the landscape.
- Designed a brick façade with cantilevered balconies that enhance both form and function.
- Delivered detailed architectural plans, sections, and elevations, fully modeled in Revit.
- Created high-quality 3D visualizations to communicate design intent.
- Coordinated MEP spaces to maintain spatial efficiency without compromising aesthetics.

DELIVERABLES

- Full architectural BIM model
- Construction documentation
- Client presentations with 3D visualizations and walkthroughs
- Climate-responsive design emphasizing passive lighting and views





Medical Office Building 04 Cardio Colombia Headquarters

Type: Institutional – Offices & Medical Clinics

Client: CardioColombia

Location: La Castellana, Bogotá, Colombia

Year: 2022

Built Area: 420 m²

Role: Lead Designer & Project Coordinator

Tools: Revit, AutoCAD

This institutional building was designed for CardioColombia in the La Castellana neighborhood of Bogotá. With a total of 420 square meters across three levels, the project combines medical consulting spaces and offices in a compact, efficient layout. The design focused on maximizing user comfort through natural lighting, passive cross ventilation, and full compliance with local building and healthcare regulations. The project was fully approved by the city's regulatory entity through a coordinated permitting process.



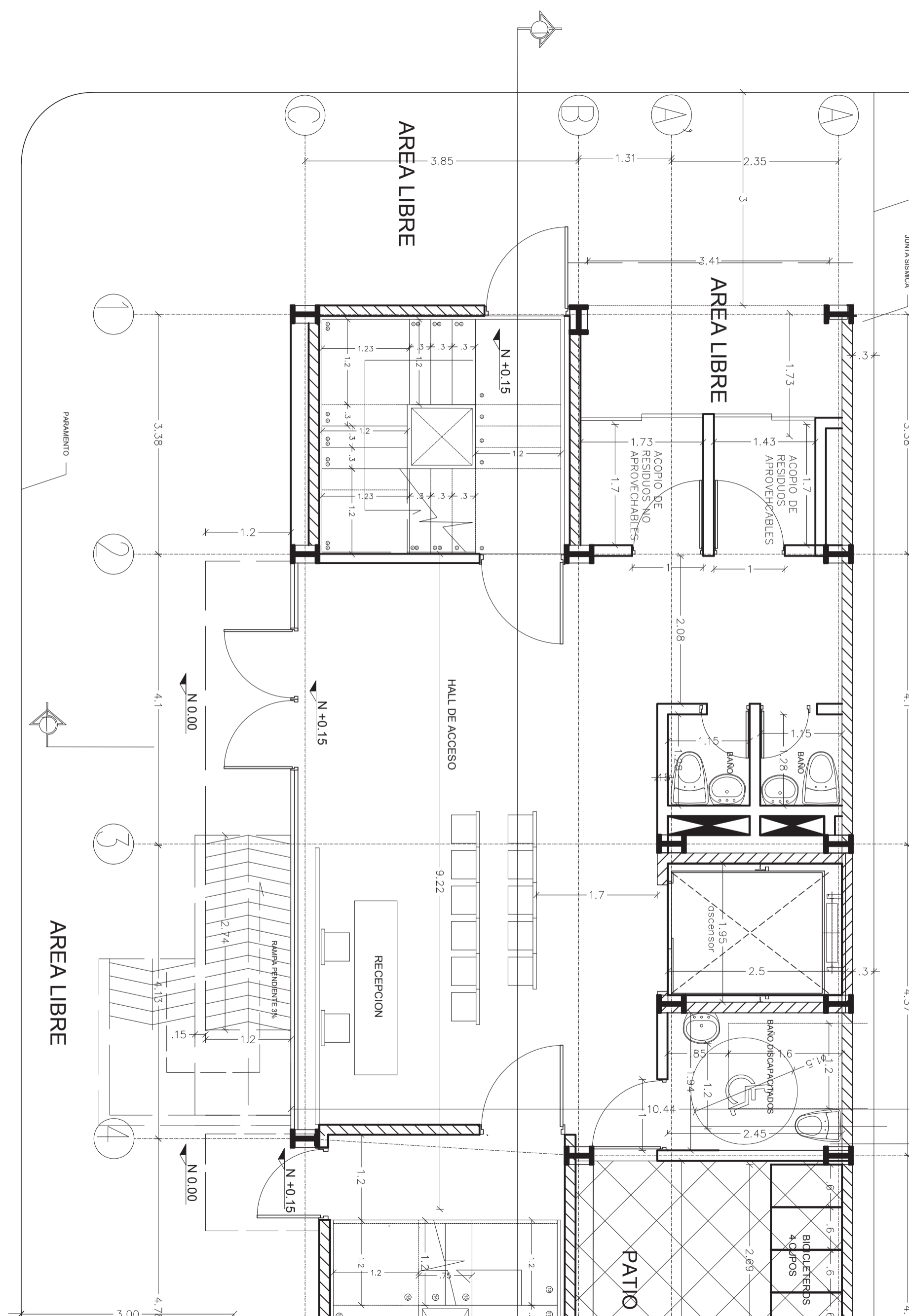
PROJECT DESCRIPTION:

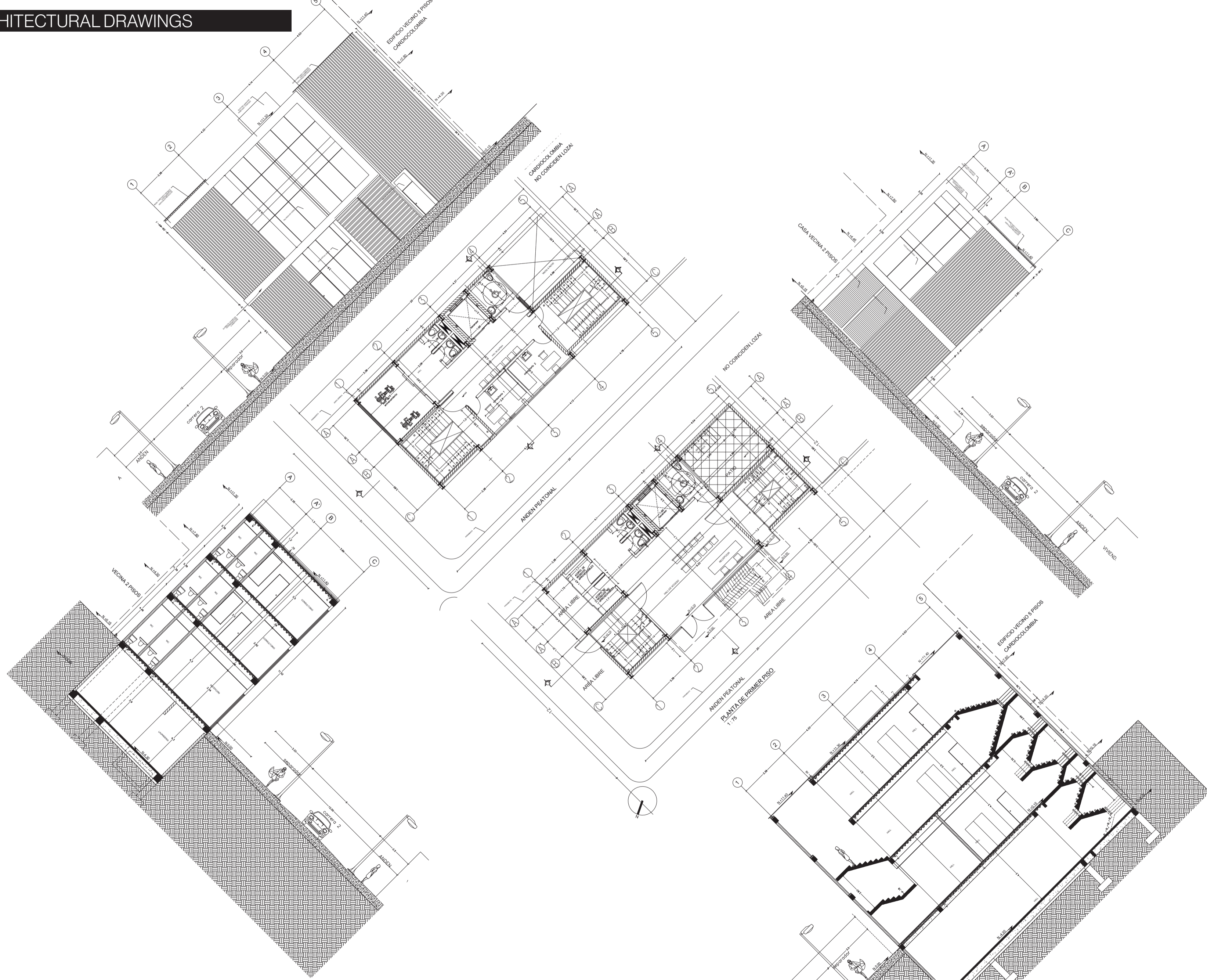
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DELIVERABLES

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- Visualization renders with Twinmotion
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05 Custom Brick House

Type: Single-Family Residential

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Year: 2024

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Tools: Revit, AutoCAD, Twinmotion

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