

CASE STUDY 2.0

REBUILDING LOS ANGELES

*A Visionary
Catalog for
Resilient and
Sustainable
Homes*

INTRODUCTION

ALPNA GUPTA ARCHITECTURE



Alpna Gupta, AIA is a licensed architect based in Los Angeles with 20 years of experience in the industry. She has experience in senior positions at Walker Workshop in Los Angeles and has worked with respected firms like Marmol Radziner and Leroy Street Studio. These roles have helped her refine her skills and develop a design sensibility with a unique attention to craft and detail.

Her path to architecture started with a background in sculpture and engineering, blending creativity with technical know-how. Before pursuing architecture, she showcased her artistic vision through large-scale installations across the Midwest, deepening her appreciation for the relationship between art, space, and structure. After relocating to New York City, Alpna's fascination with its iconic architecture led her to construction management, where she gained a deeper understanding of design and construction, solidifying her passion for architecture.

Outside of work, Alpna enjoys running in the park and experimenting with new techniques in her studio, such as kerf and steam bending plywood.

SUNDRIFT HOUSE



Nestled in the Southern California landscape, this two-story residence blends modern restraint with natural warmth. Designed for comfort, connection, and quiet resilience, the home balances open, light-filled social spaces on the ground floor with calm, private retreats above.

The entry sequence unfolds through a planted garden courtyard beneath a trellis, setting a serene tone that continues throughout the house. Inside, the layout flows seamlessly from kitchen to dining and living spaces, all oriented toward the patio and optional pool. Expansive sliding doors blur the boundaries between indoors and outdoors, inviting natural light and breezes while extending the living area into the garden.

Upstairs, the private level separates the primary suite from the secondary bedrooms to create both privacy and connection. The primary suite includes a generous bedroom, walk-in closet, and ensuite bath, opening onto a private deck that captures

light and views while offering a quiet retreat. Across the hall, two bedrooms share a Jack-and-Jill bathroom and open onto a smaller shared deck. A study nook provides a flexible space for homework or quiet focus.

Materially, the design pairs shou sugi ban wood siding with smooth plaster to create contrast and texture, complementing the home's clean modern form. Deep roof overhangs shade large glazed openings, balancing transparency and privacy while enhancing the home's timeless silhouette.

Every aspect of the house supports both beauty and practicality. Class A metal roofing and fire-resistant construction meet California's Wildland Urban Interface standards, while drought-tolerant native landscaping provides a low-maintenance and climate-responsive setting. The flat roof over the garage is solar-ready, anticipating future energy generation.

PARCEL INFO & DIAGRAMS

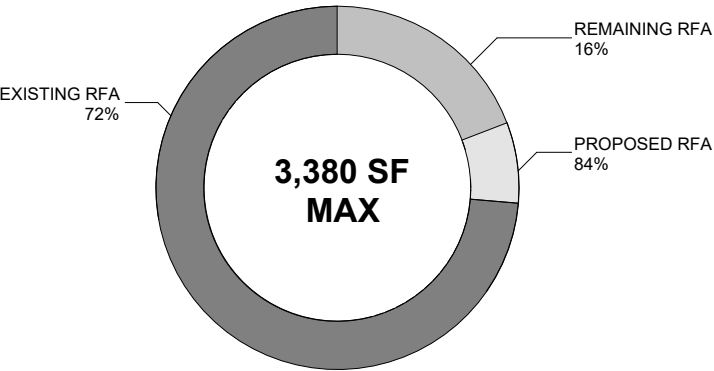
ADDRESS: 1051 N GALLOWAY STREET



BUILDING AREAS

RESIDENTIAL FLOOR AREA CALCULATIONS	
FIRST FLOOR	1,258 SF
FIRST FLOOR OVERHANG	108 SF
SECOND FLOOR	1,182 SF
SECOND FLOOR OVERHANG	53 SF
GARAGE	406 SF
GARAGE EXEMPTION	(200 SF)
TOTAL RESIDENTIAL FLOOR AREA	2,807 SF

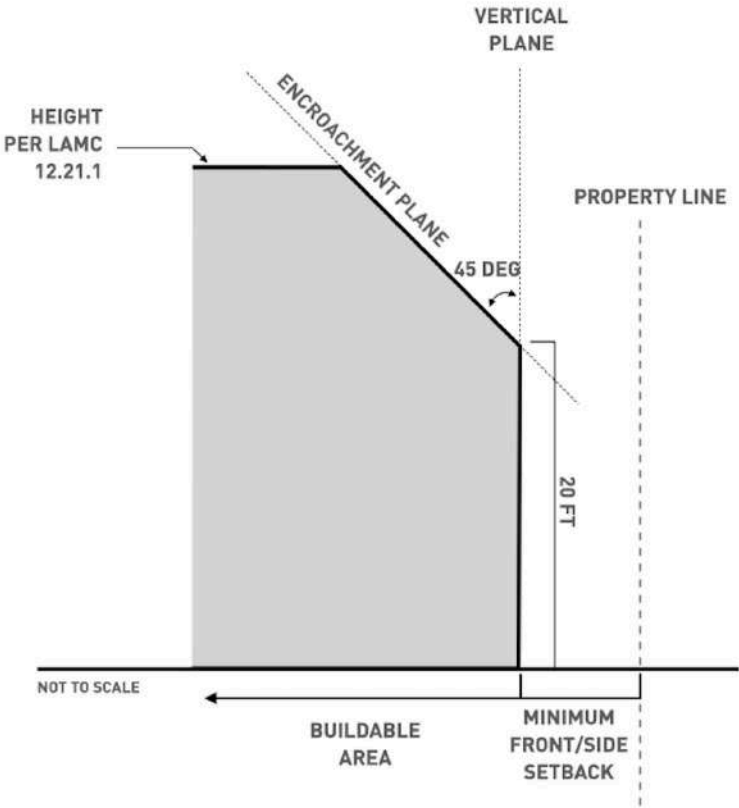
FLOOR AREA SUMMARY



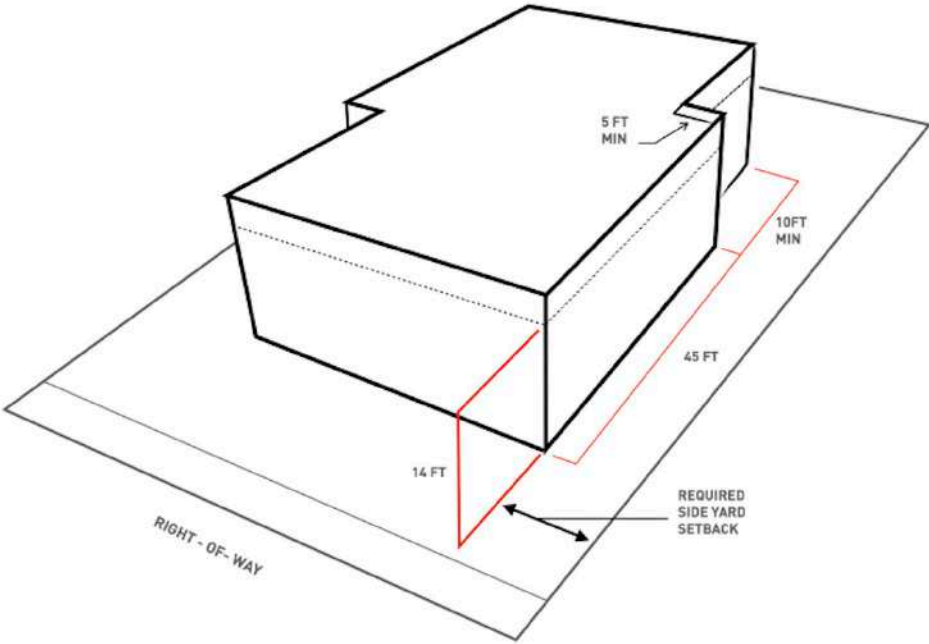
PROJECT DATA

SITE ADDRESS:	1051 N GALLOWAY STREET
LOT AREA:	5,200 SF
ZONE:	R1-V1
MAXIMUM ENVELOPE HEIGHT:	30'-0" MAX ABOVE GRADE (PER TABLE 12.08 C.5.(b))
SETBACK REQUIREMENTS:	FRONT YARD: 20'-0"
	REAR YARD: 15'-0"
	SIDE YARD: 5'-0" (4'-0" + 1'-0" ABOVE 18'-0" IN HEIGHT)
PARKING REQUIREMENTS:	2 COVERED SPACES
LOT COVERAGE:	2,412 SF < 50% LOT AREA MAX PER TABLE 12.08 C.5.(b)
BUILDING AREA:	2,807 SF < 65% LOT AREA MAX PER TABLE 12.08 C.5.(b)

BUILDING HEIGHT DIAGRAM



BUILDING ENVELOPE AND SETBACK DIAGRAM



DESIGN FEATURES



FIRE RESISTANCE

The house is designed to comply with California's Wildland Urban Interface (WUI) standards, featuring Class A metal roofing and fire-resistant sheathing to protect against ember exposure and radiant heat.



ROOFING

A Class A standing seam metal roof is used on the upper level for durability and fire resistance. The first-floor flat roof features a TPO membrane that provides a clean, modern look and long-term performance.



BUILDING SIDING

The upper level is clad in shou sugi ban charred wood for natural texture and durability, while the ground level uses light-colored cement plaster to create a bright, contrasting base for the home's social spaces.



WINDOWS & DOORS

Windows and doors feature metal frames, tight weather seals, and dual-pane tempered glass to enhance durability, comfort, and fire performance.



DEFENSIBLE SPACE INTEGRATION

Ground surfaces are finished with pea gravel interspersed with fire-resistant plant species. The landscape design balances visual appeal and compliance with defensible space zoning, using succulents and low-fuel vegetation near the structure and soft, fire-resilient plantings in the outer zones of the garden.



VENTS

Venting is minimized, and where necessary, ember-resistant vents are installed to prevent ember intrusion into attic and subfloor spaces.



EMBER-RESITANT FEATURES

Additional protective measures include non-combustible concrete paving for patios and walkways, and fiber cement fencing along the perimeter, enhancing the overall fire resilience of the property.



SUSTAINABILITY

Sustainability is approached through passive design and energy efficiency. The flat garage roof is solar-ready, while deep overhangs reduce heat gain and bring in natural light. Drought-tolerant native landscaping further minimizes water use and maintenance.



DESIGN QUALITIES

The design emphasizes clarity, proportion, and a calm material palette that creates balance and harmony throughout the home. Light, open spaces on the ground floor feel vibrant and connected, while the darker tones and enclosed volumes above offer a sense of retreat and tranquility.



CONSTRUCTION METHODOLOGY

The home is organized around standard material dimensions and aligned structural systems to simplify construction, reduce waste, and improve overall build efficiency.



EFFICIENCY

Efficiency is achieved through a compact footprint, thoughtful material use, and a straightforward structural approach that supports ease of construction



STYLE FEATURES

Modern minimalism meets warmth and texture in the home's expression. Smooth plaster contrasts with the rich shou sugi ban siding, while deep overhangs and slender metal details highlight its clean lines and timeless Southern California character.



ADDITIONAL SPECIAL FEATURES

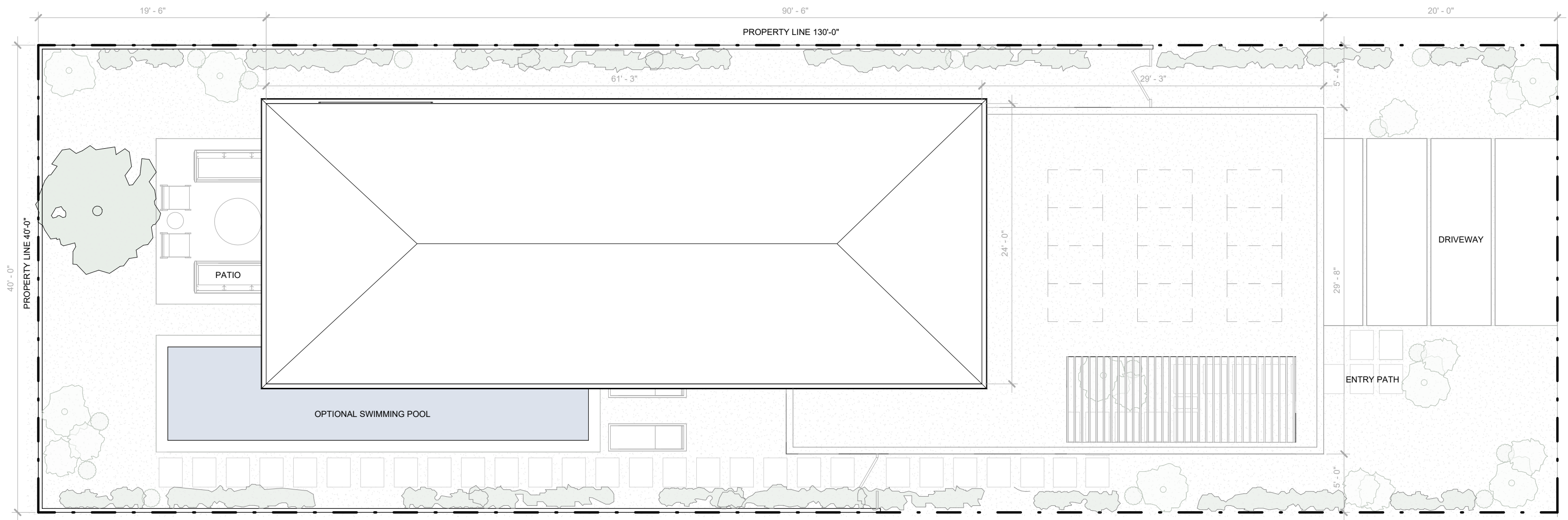
Indoor-outdoor connections on the first floor and upper-level decks extend living spaces outward, creating flexibility and a strong connection to the Southern California climate and landscape.



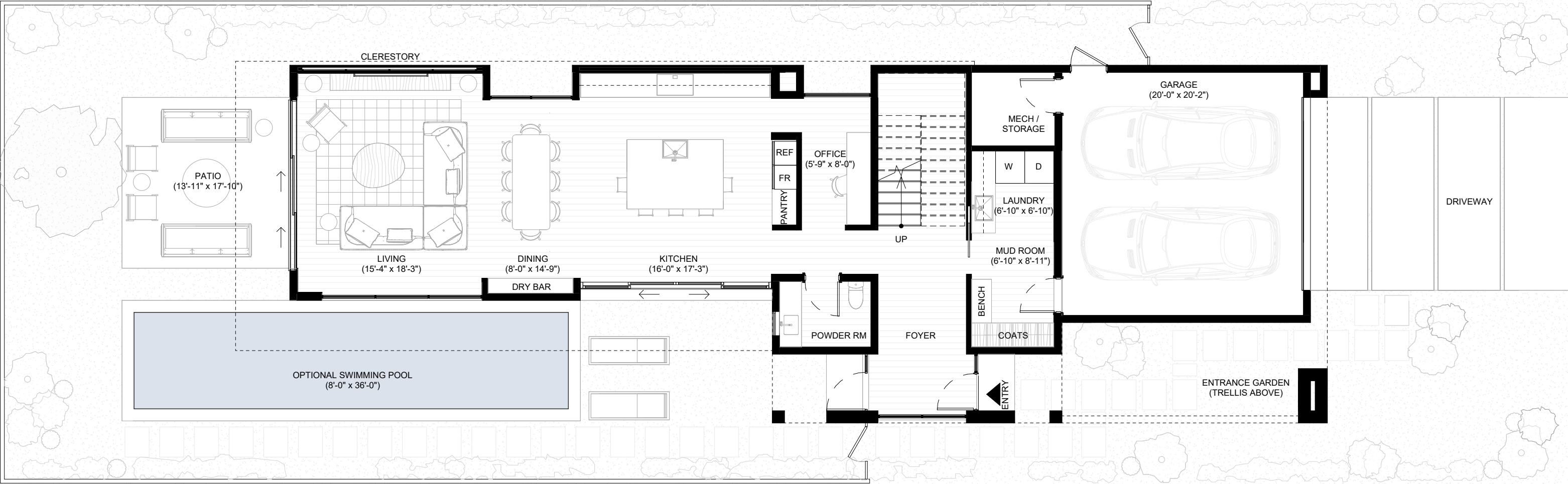
CUSTOMIZATION POTENTIAL

The design allows for flexible customization to suit different needs and budgets. Options include substituting the shou sugi ban siding with fiber cement panels, adjusting glazing sizes, or reconfiguring the pool area into an expanded patio and entertainment space.

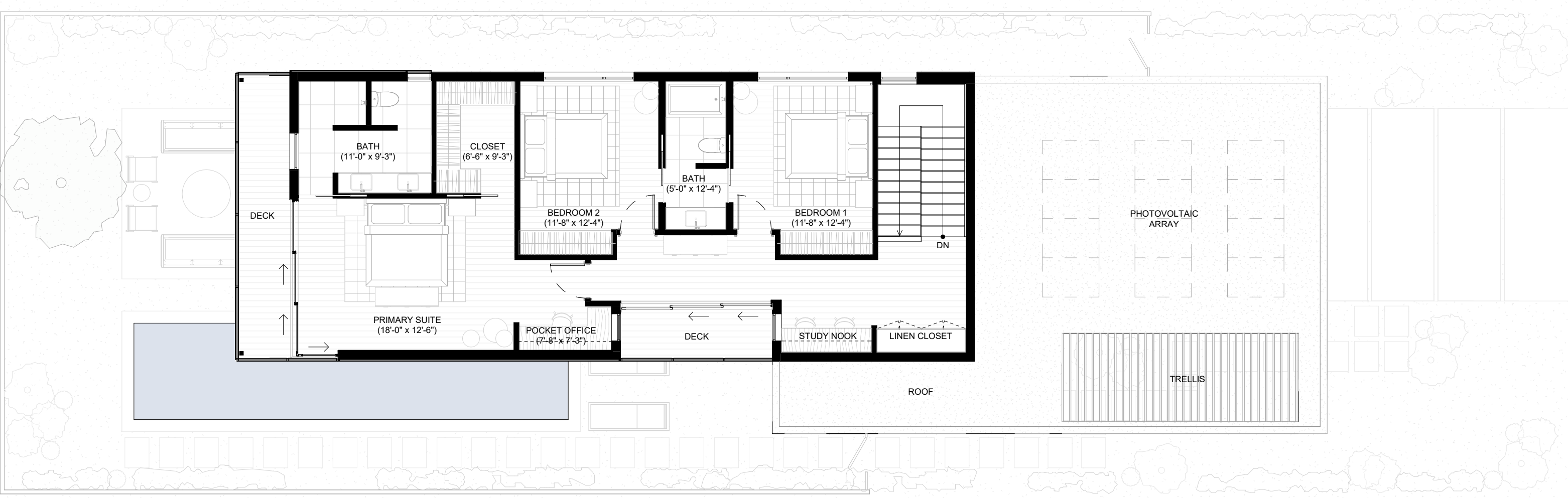
SITE PLAN



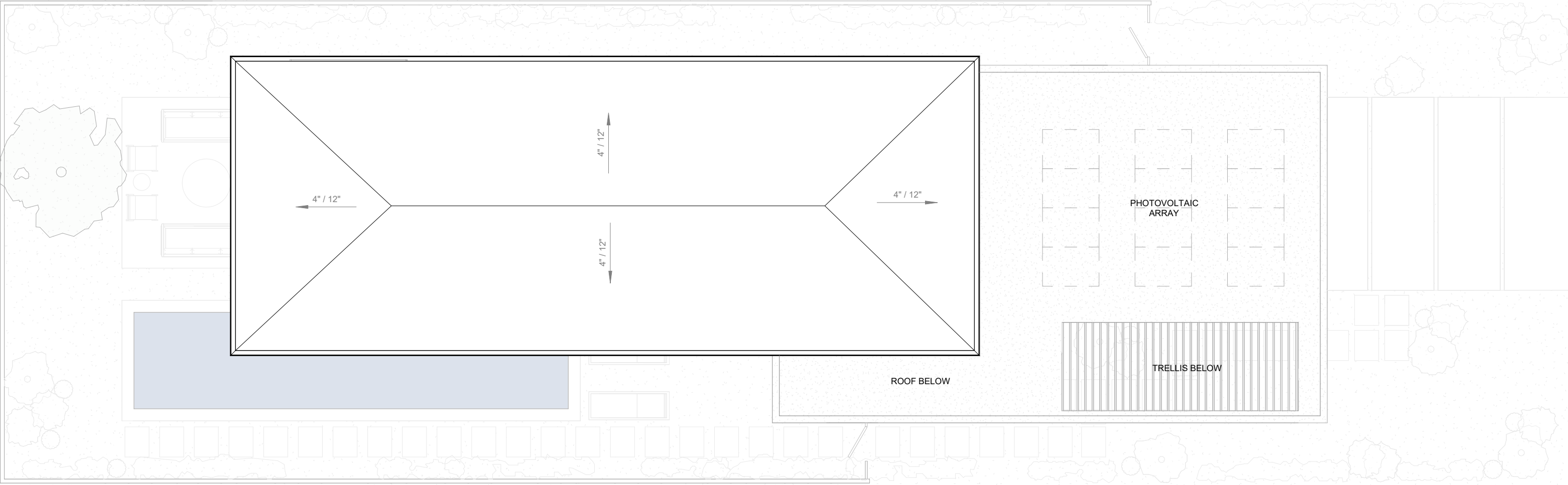
FIRST FLOOR PLAN



SECOND FLOOR PLAN

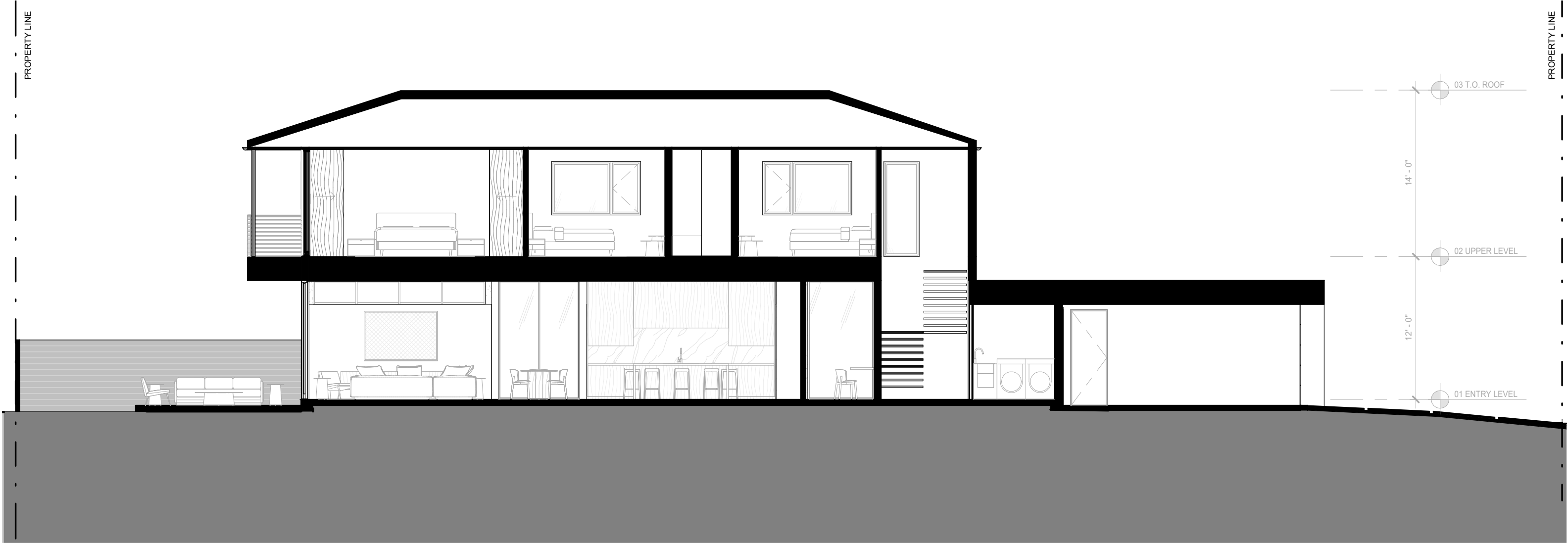


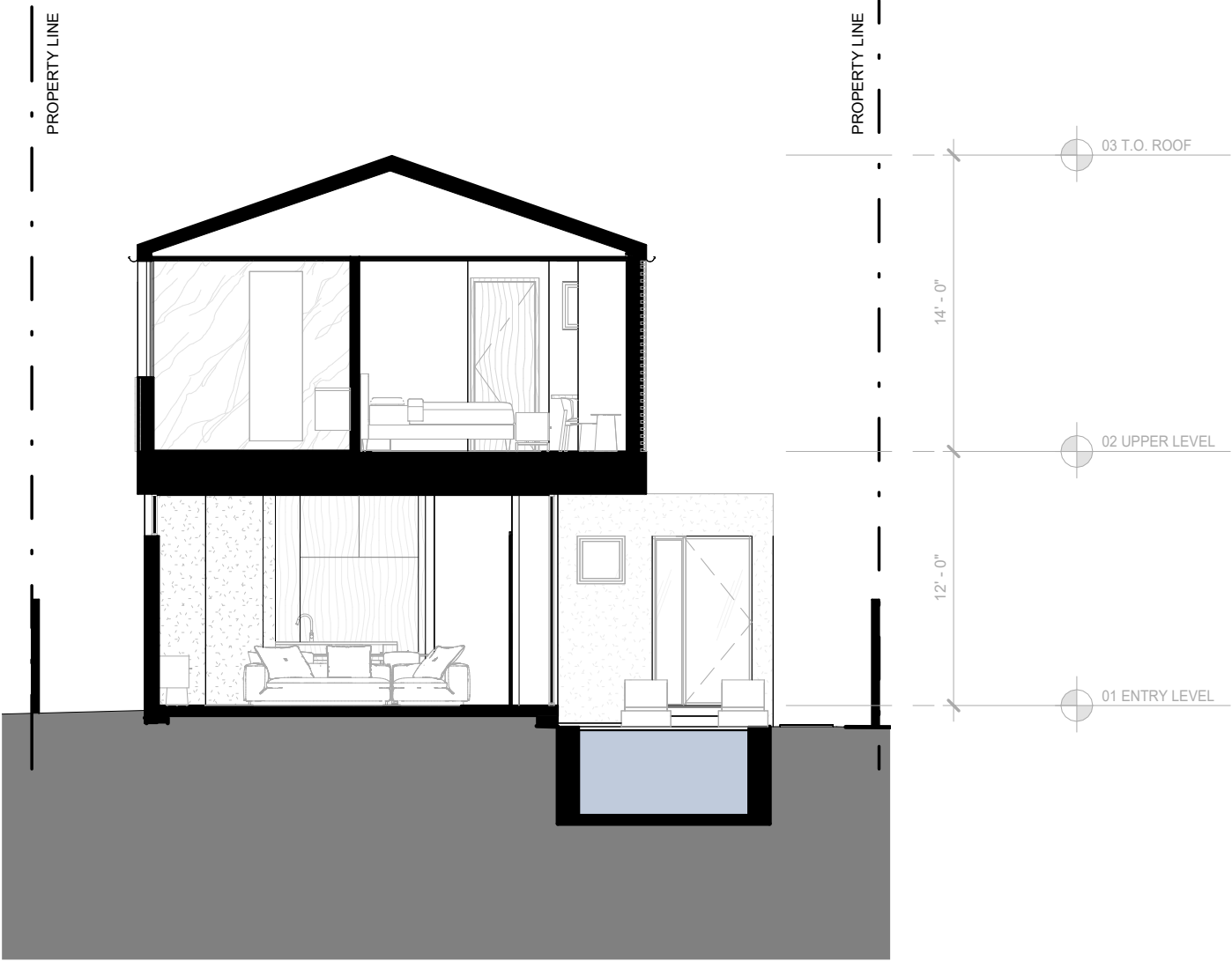
ROOF PLAN



SECTIONS

LONGITUDE





SOUTH



EAST AND WEST



NORTH



RENDERINGS











CASE STUDY 2.0

REBUILDING LOS ANGELES

*A Visionary
Catalog for
Resilient and
Sustainable
Homes*