

CASE STUDY 2.0
REBUILDING LOS ANGELES

*A Visionary
Catalog for
Resilient and
Sustainable
Homes*

PROJECT NARRATIVE



In a quiet, cozy street in Altadena, a small, compact house emerges from a landscape marked by fire. The design responds directly to this environmental trauma, balancing defensibility, resilience, and affordability with a deep commitment to ecological integration and neighborhood continuity.

Defensible space is established with strategic clarity. A gravel perimeter encircles the structure, providing a simple, low-maintenance buffer zone that resists ignition and keeps embers at bay. Beyond the gravel, an extensive planting scheme takes root—featuring native, drought-resistant, and fire-wise species carefully selected not just for beauty but for their ability to self-regenerate and regenerate the site.

The home is clad in standing seam metal panels, chosen for their exceptional fire resistance, wind protection, and durability. Their recyclability ensures that the material lifecycle reflects the environmental ethos of the project. In certain areas, a perforated rainscreen system diffuses sunlight and heat while still allowing for ventilation and filtered views, creating moments of shifting transparency and privacy.

While new, the house carefully respects its context, adopting a pitched roof to echo the lines of surrounding homes. It's modest, economic, and familiar—fitting into the neighborhood without mimicry, asserting itself gently with contemporary clarity.

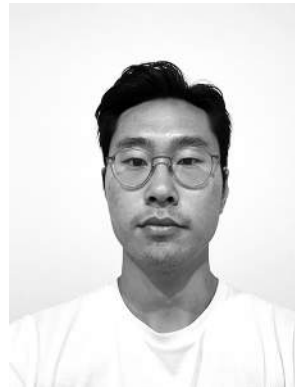
Despite its compact footprint, the house feels expansive. Large, full-height windows are placed selectively to frame views of mature oaks, sky, and carefully landscaped moments—emphasizing the home's relationship to the land rather than its size. The interior is open and light-filled, organized efficiently to support contemporary living within a reduced envelope.

To the east, a gravel-lined parking and picnic area serves a dual purpose: a place for vehicles and a communal cloister-like gathering space, shaded and serene. It becomes a threshold between the domestic and the communal, the private and the shared, anchoring the home in a new kind of neighborhood ritual.

This project is ultimately about resilience and return. An affordable reconstruction, it proves that rebuilding after fire doesn't have to mean loss of character, comfort, or connection to the land. It means building better—with intention, humility, and hope.



INTRODUCTION



COMPANY / FIRM SUMMARY

At Solkatt, we don't just design homes — we design experiences that endure.

Founded in Los Angeles in 2021, our firm was built on the belief that architecture should be as personal as it is powerful — rooted in sustainability, shaped by context, and delivered with integrity from start to finish.

We are a tight-knit team, each bringing our area of expertise in architecture, design, sustainable systems, and high-end project delivery. What makes us different isn't just our technical skill — it's how deeply we listen.

Every project begins with a conversation, and from that, we craft tailored, functional works of art that reflect both the spirit of the site and the story of the project. Our portfolio spans some of California's most challenging and breathtaking terrain — from a simple LA backyard to the coastal enclaves of Playa del Rey to the raw beauty of the High Desert.

We excel in complex conditions: fire resilience, hillsides, view corridors, and sustainability. These qualities of a project aren't obstacles to us — they're invitations to innovate.

What sets Solkatt apart is our ability to merge the visionary with the buildable.

Our projects are more than beautiful — they perform. They breathe. They last. And, they're built for the way people live today — and tomorrow. In every structure, we embed resilience, intention, and grace — because we believe home should be an extension of you.

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11813 Major Street
Culver City, CA 90230

PARCEL INFO & DIAGRAMS

ADDRESS: 3306 TONIA AVENUE



BUILDING AREAS

GROSS RESIDENTIAL FLOOR AREA	
LEVEL 1	1,925 SQ FT
LEVEL 2	1,254 SQ FT
LEVEL 1 - OVERHANG	0
LEVEL 2 - OVERHANG	0
SUBTOTAL	3,179 SQ FT
DOUBLE HEIGHT SPACE EXEMPTION	0
COVERED PORCH EXEMPTION	0
GARAGE EXEMPTION	-400 SQ FT
BASEMENT EXEMPTION	0
GRAND TOTAL	2,779
MAXIMUM GSA ALLOWED	2,836 PER CSD

PROJECT DESCRIPTION

NEW TWO STORY SINGLE FAMILY RESIDENCE.

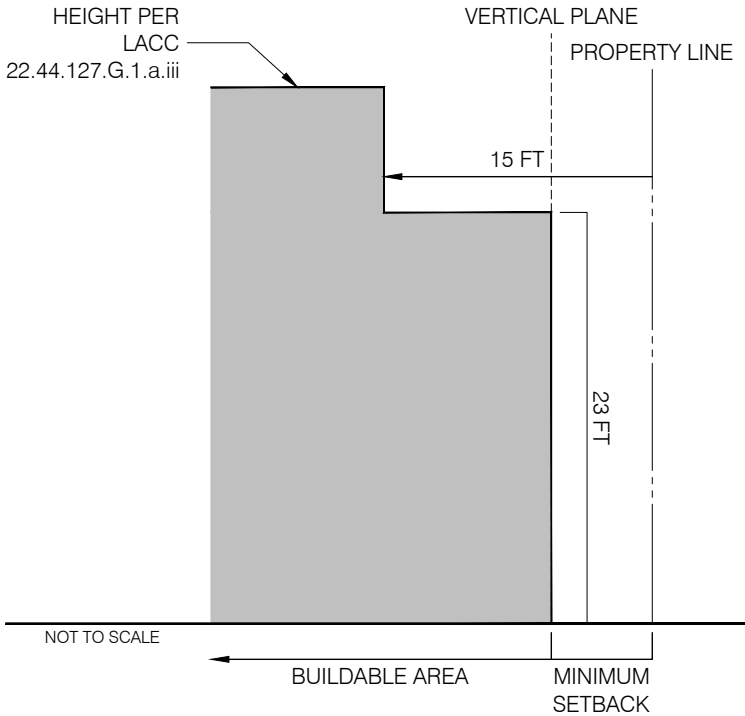
3 BEDROOMS
2.5 BATHROOMS
2 CAR GARAGE

1,525 SQUARE FEET AT FIRST FLOOR PLUS 400 SQUARE FOOT GARAGE AND
1,254 SQUARE FEET AT SECOND FLOOR PLUS 350 SQUARE FOOT ACCESSIBLE ATTIC LOFT

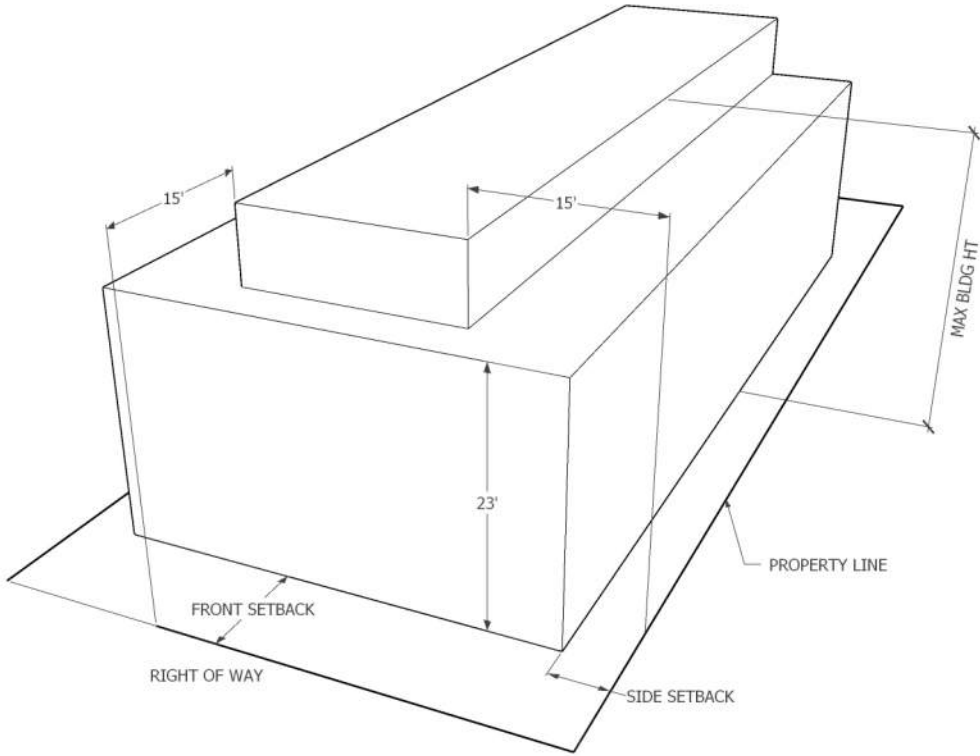
PROJECT DATA

SITE ADDRESS	3306 TONIA AVE
LOT AREA	7,345 SQ FT
ZONING	R-1 ALTADENA CSD
MAXIMUM ENVELOPE HEIGHT	30'-0"
ADDITIONAL HEIGHT REQUIREMENTS	ENCOACHMENT PLANE. SEE DIAGRAM
MAX STRUCTURE HEIGHT PROVIDED	30'-0"
SETBACK REQUIREMENTS	FRONT YARD: 20'-0" SIDE YARD: 5'-7 3/4" REAR YARD: 25'-0"
PARKING REQUIREMENTS	2 COVERED SPACES (8'-6" x 18')
LOT COVERAGE	MAX ALLOWABLE COVERAGE: 2,836 SQ FT PROVIDED: 2,054 SQ FT

BUILDING HEIGHT DIAGRAM



BUILDING ENVELOPE AND SETBACK DIAGRAM



In the aftermath of LA's most recent wildfires, our Altadena rebuild prioritizes safety, durability, and modern aesthetics. The exterior features standing seam cladding, a non-combustible material that offers both sleek design and enhanced fire resistance. Beneath this, a fireproof underlayment provides an additional protective layer against radiant heat and embers.

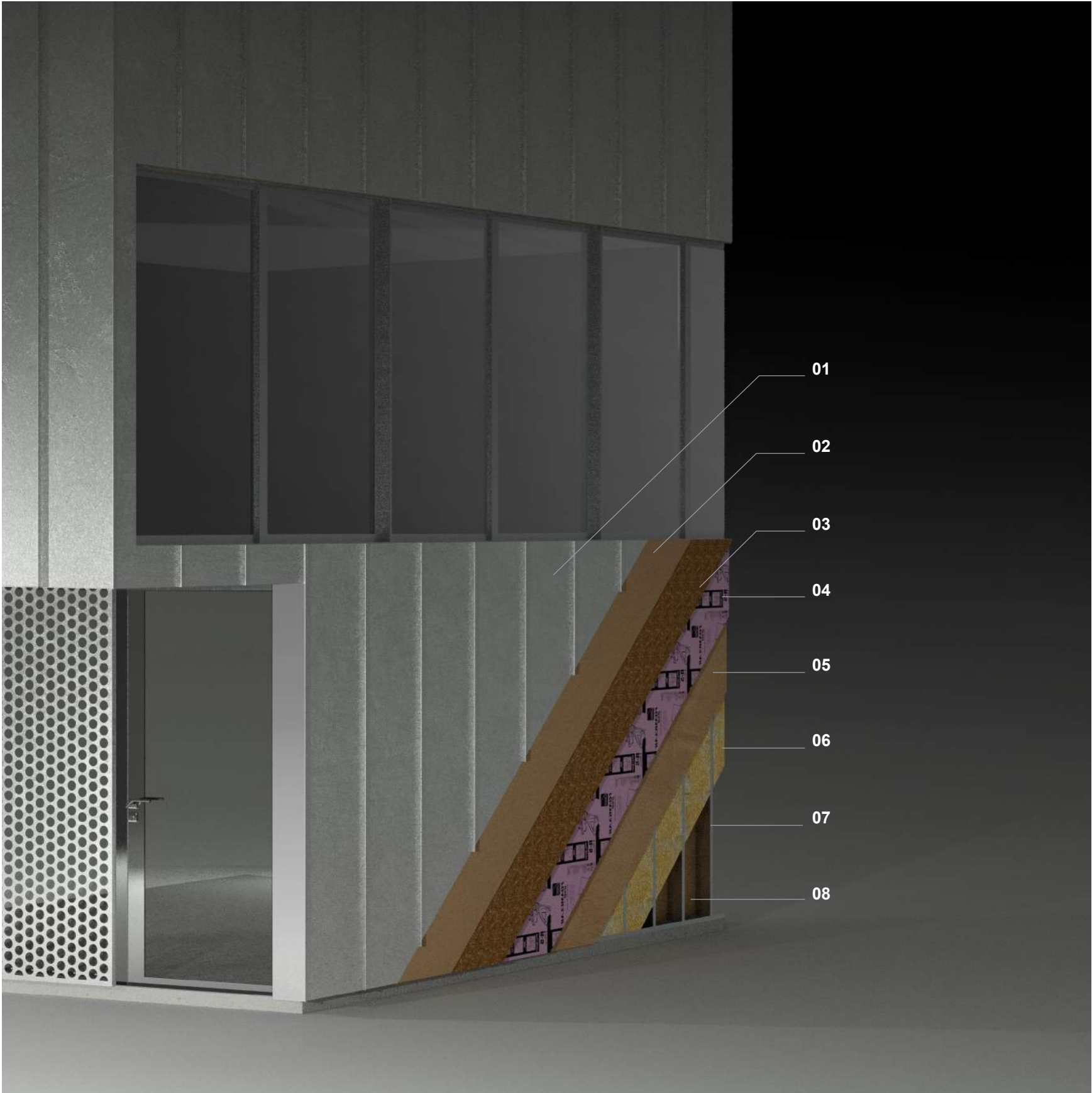
The wall assembly includes rigid insulation for energy efficiency, and gypsum wall board as a non-combustible interior lining. Cold-formed steel framing replaces traditional wood studs, offering superior fire resistance and structural stability. This choice ensures that the framing will not ignite or contribute to fire spread. This gives the building a type-II fire rating, second only to the way skyscrapers are designed.

Insulation materials like mineral wool and fiberglass are incorporated for their fire-resistant properties, effectively slowing heat transfer and limiting fire spread. These materials are tested to withstand high temperatures. The envelope achieves a 1-hour fire rating throughout.

This comprehensive approach to fire-resistant design not only enhances the safety and durability of the home but also aligns with our commitment to building a resilient future in wildfire-prone areas.

- 01. Standing Seam Metal Panel
- 02. Fire Proof Underlayment
- 03. Densdeck Fire Barrier
- 04. Rigid Insulation
- 05. Structural Sheathing
- 06. Batt Insulation
- 07. Cold-formed Light Gauge Steel Framing
- 08. Type-X Gypsum Board, Interior Finish

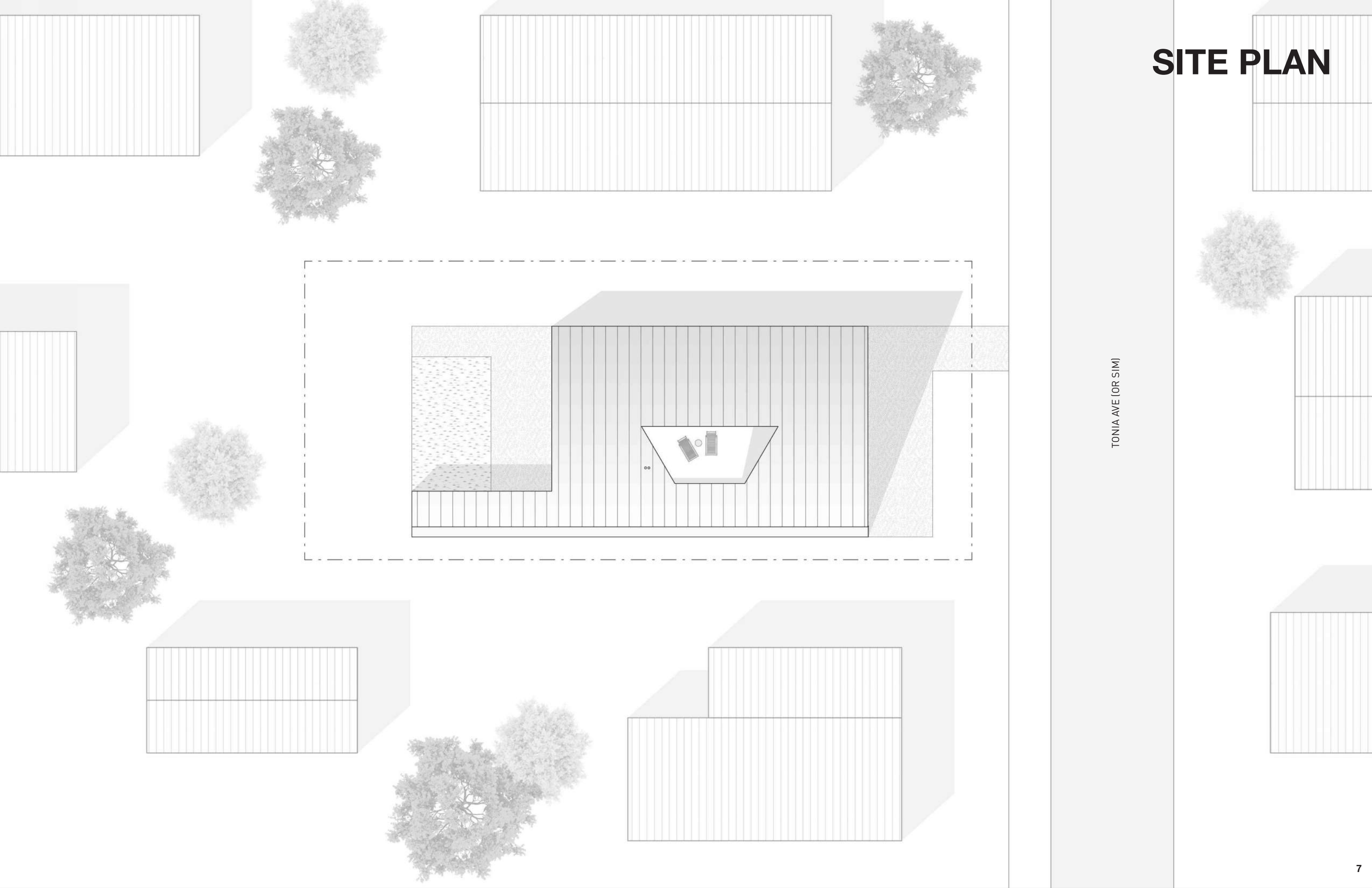
METAL PANEL
FIRE-PROOF
1-HOUR RATED EXTERIOR



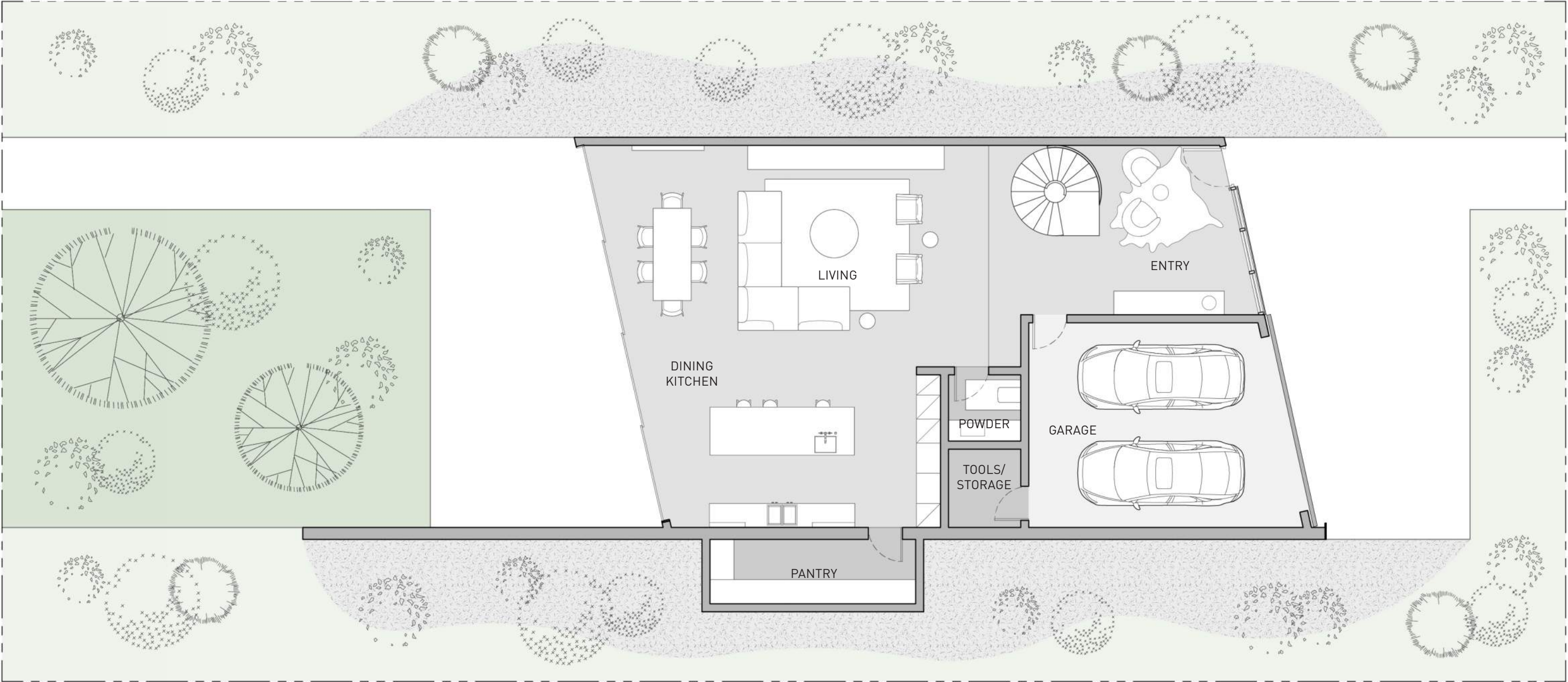


PLANS

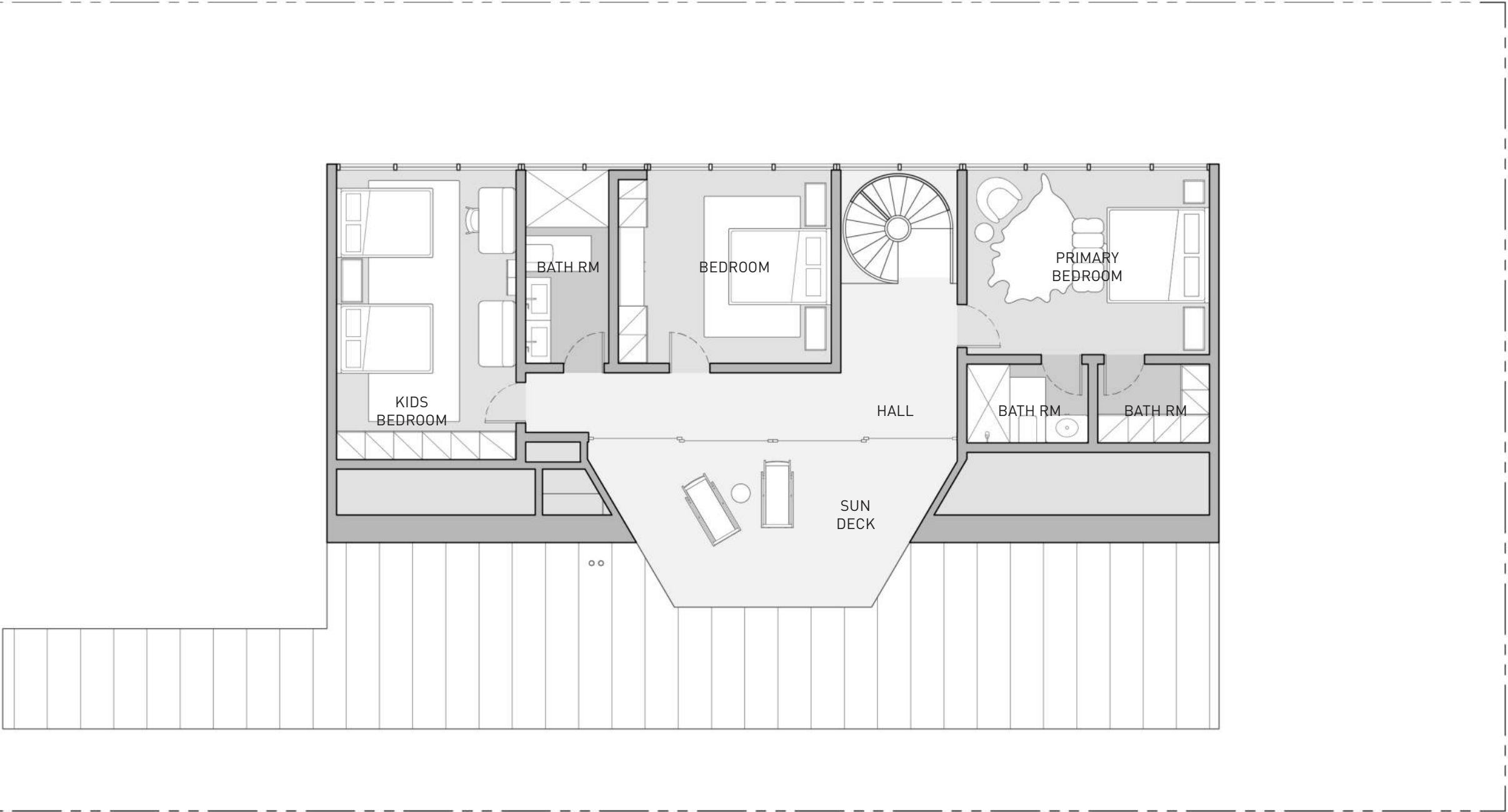
SITE PLAN



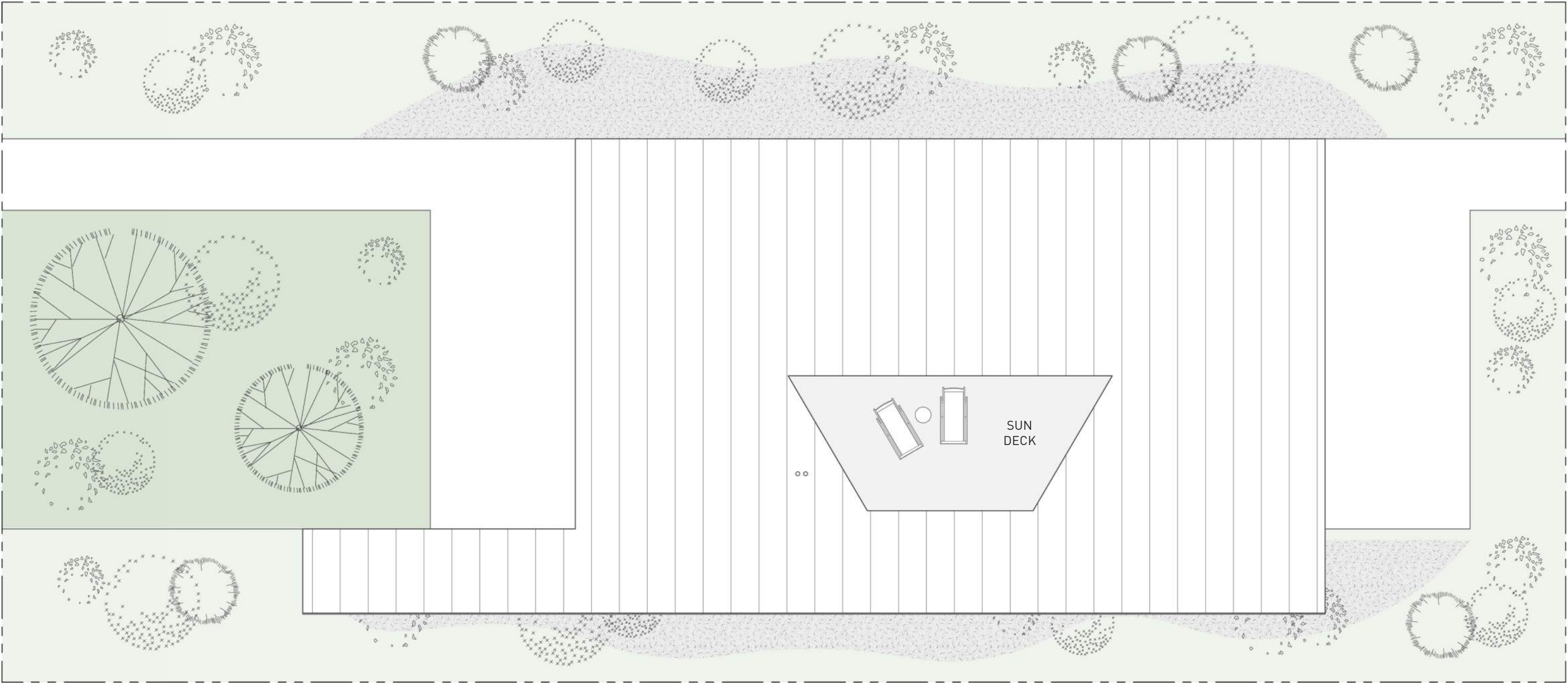
GROUND LEVEL



SECOND LEVEL



ROOF



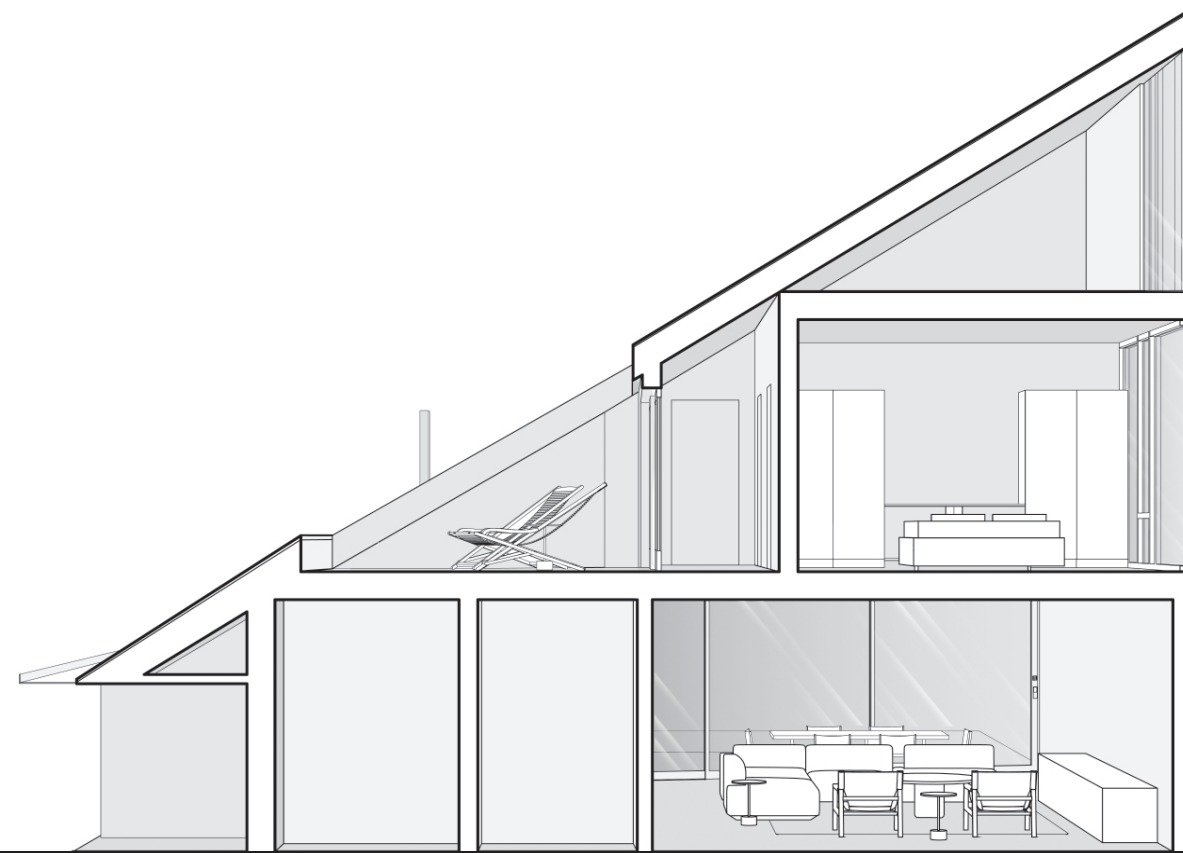


SECTIONS

LONGITUDINAL



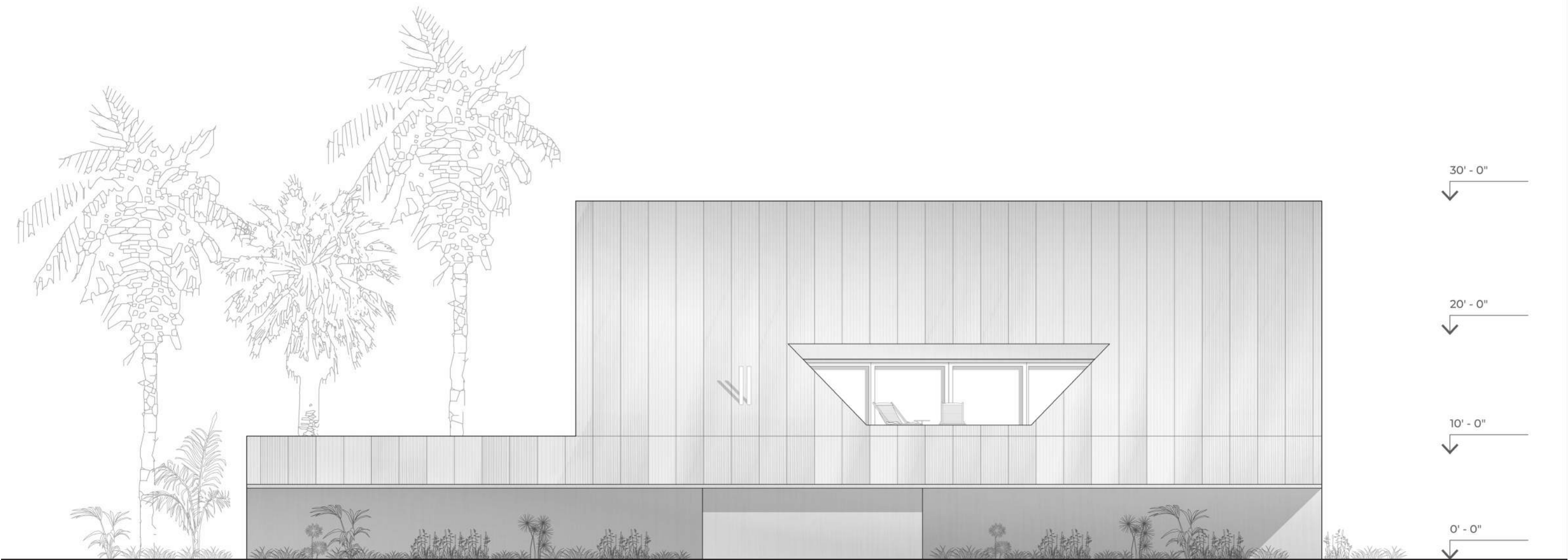
TRANSVERSE



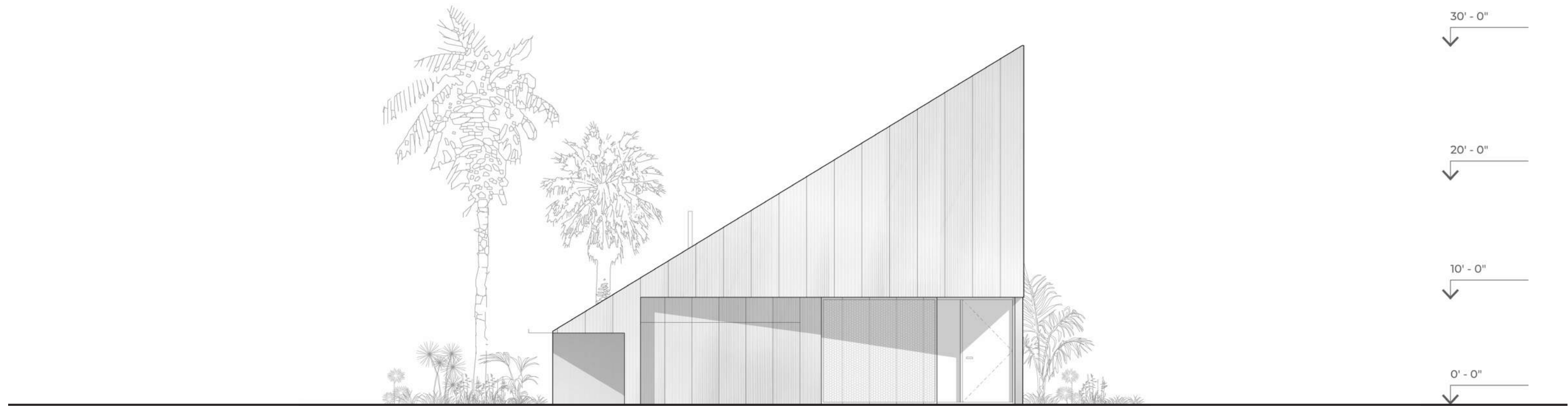


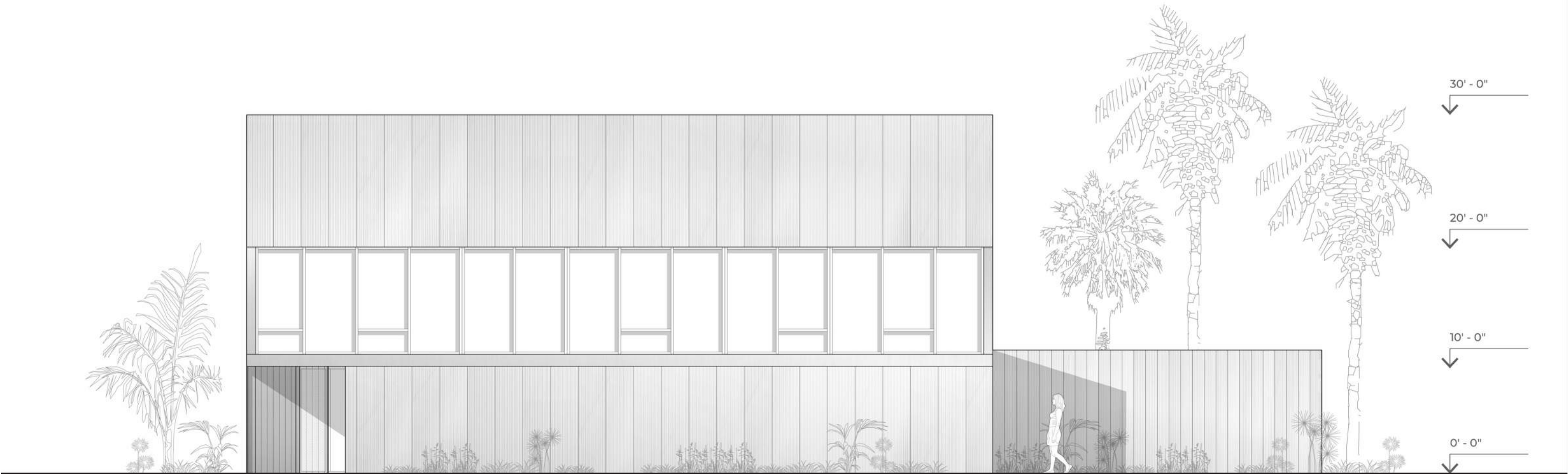
ELEVATIONS

NORTH



SOUTH









RENDERINGS









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