

CALIFORNIA HOUSE HALF-FLOATING, HALF-BURIED

LOS ANGELES,
CALIFORNIA, USA



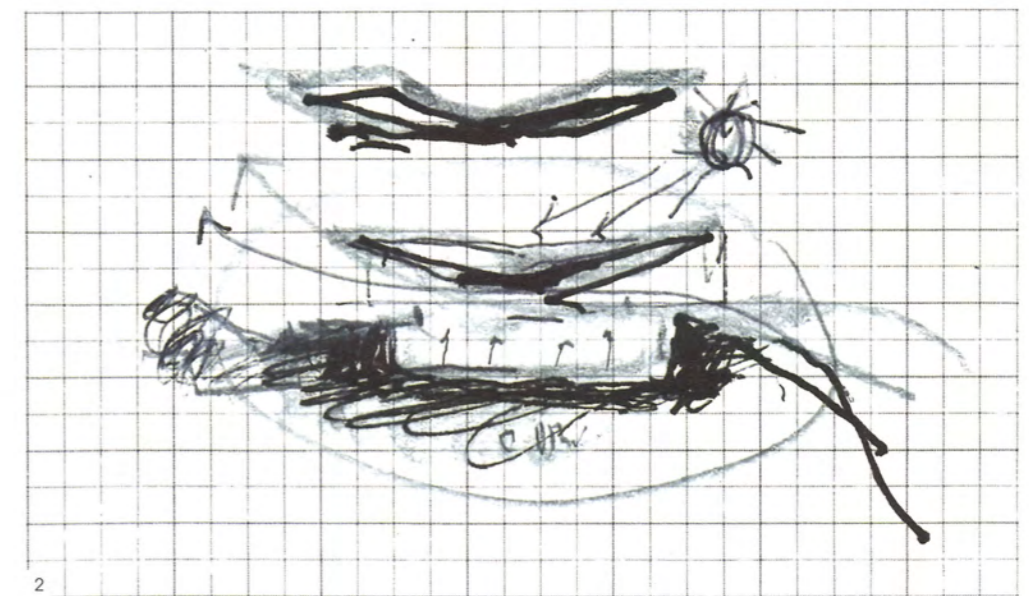
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GLUCK+



Peter Gluck

An internationally renowned architecture firm in New York City. Recognized for Architect Led Design Build, the firm builds most of its diverse portfolio of award-winning work.



- 1- The image of the snake swallowing an elephant from *The Little Prince* inspired the concept of how the building should fit into the landscape
- 2- Study sketches of sectional views of the building and the bioclimatic scenario

Peter Gluck heads an architectural firm with 40 years of experience in design and construction so he can quickly grasp the potential of a challenging site. His son Will, who wrote and directed the remake of *Annie* and two *Peter Rabbit* features, spent two years trying to purchase a steep plot of land leading off Mulholland Drive, a winding hilltop highway. The owner had tried and failed to develop the slope, considered it unbuildable but was reluctant to sell. "The concept of the house came to me 15 minutes after I started to sketch", recalls Peter, who then had to navigate the labyrinth of regulations that impede creative architects in Los Angeles.

The basic idea remained unchanged: a rectilinear glass-walled pavilion canopied by a roof plane that projects out on all four sides to block summer sun, sitting atop private spaces excavated from the hillside. The living area above and the bedrooms below both command sweeping views over the San Fernando Valley and the range of hills that divide it from the flatlands of Los Angeles to the south. Trees block the only house in sight, so that it is easy to imagine one is living in a wilderness rather than a metropolis. Philip Johnson built a nearly windowless guest house a short stroll from his celebrated Glass House; Peter has achieved a similar complementary relationship of exposure and enclosure within a single volume.

In L.A., you are allowed to excavate only a limited amount of earth from hillsides, but the space below the ground-level pavilion does not count towards the total, so the lower level can extend well beyond. That greatly reduces the impact of the 700 sq. m house, which Will likens to a Trojan Horse, concealing its true identity. As you approach, the down ramp to the garage is the only hint that there is more to the house than first appears. The roof of the lower story is concealed by greenery and paving with glass inserts to pull in natural light. Since the bedrooms have windows on only one side, the upper story could be fully glazed and still meet the California's exacting energy requirements. And, since doors can be opened for cross ventilation, the house rarely requires mechanical air conditioning, even at the height of summer when daytime temperatures can exceed 40°C.

The roof plane is tapered at the edges and supported on slender steel columns; upright to support the load and splayed to absorb seismic shifts. The design review board rejected the idea of a flat roof, not for stylistic reasons, but out of concern it would be used as

a dance floor. By folding up two corners, the architects were able to enlarge the field of view and make the roof plane seem even more airborne. The apparent lightness is deceptive, for it is a complicated structure of steel beams and a wood frame, 50-cm thick and heavily insulated. Steel interior columns supplement the perimeter supports allowing a continuous clerestory above the wooden boxes. A single sculptural millwork divider conceals all mechanical systems within the floating roof and 9-m deep concrete piles stabilize the house against potential earthquake forces.

This project has an elemental quality, achieving a harmonious balance of earth and air. Hawks wheel overhead and the freeway traffic far below is muted. The hills shimmer in the heat of summer and dissolve in the morning mists. The upper level is suffused with light and opens up on all four sides to a glass-railed terrace, a pool and a drought-resistant garden of succulents. Wood battens enclose the hearth, powder room, storage cabinets, and a tiny study that Will can close off in order to write undisturbed. These containers - thermally-modified maple on the outside, rift-cut white oak within - project through the glass like paniers, heightening the sense of transparency to either side. Kitchen and dining open onto an expansive living area with custom-designed modular furniture that can be reconfigured for entertaining. By contrast, the downstairs spaces - four bedrooms opening off a spinal corridor, an office and a sybaritic screening room - are snug and dimly-lit, with maple floors and white oak cabinetry. There, the inspiration comes not from nature but from Jun'ichirō Tanizaki's classic essay, *In Praise of Shadows*.

Will shares his father's commitment to modernism, and his wife and their two teenage daughters share his passion for their new home, which demonstrated its versatility as a live-work retreat during the Covid lockdown. As a filmmaker, he delights in its cinematic qualities particularly the way it reveals a succession of surprise vistas and hidden corners, indoors and out. And he insisted that it be as technologically smart as it is sustainable. Batteries store the energy generated by rooftop solar panels, protecting the house from power cuts. There are back up systems and, if all else fails, Will enjoys fixing things. For Peter, it is an inspired sequel to the Tower House, which his architect son Thomas designed, on the family compound at the heart of New York State.

A rectilinear glass-walled pavilion canopied by a roof plane that projects out on all four sides to block summer sun, sitting atop private spaces excavated from the hillside.



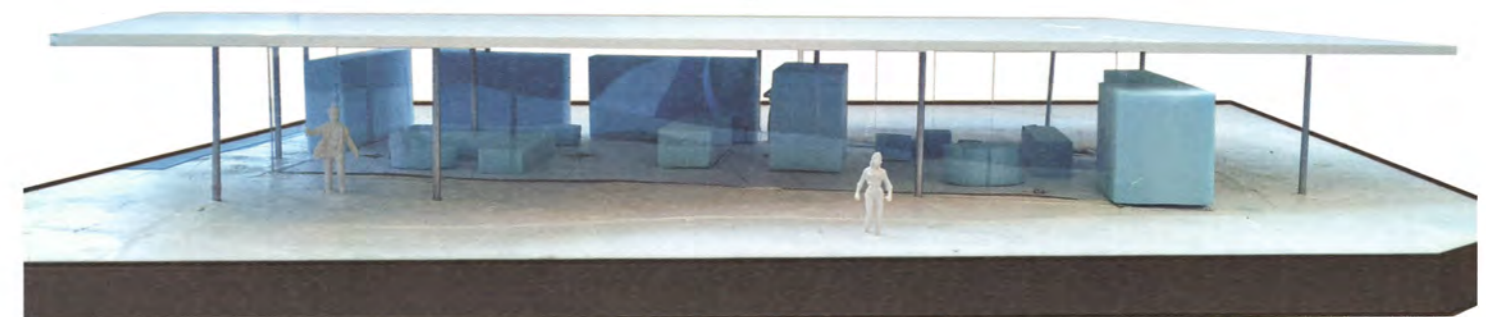
Building view from south - Scale 1:500



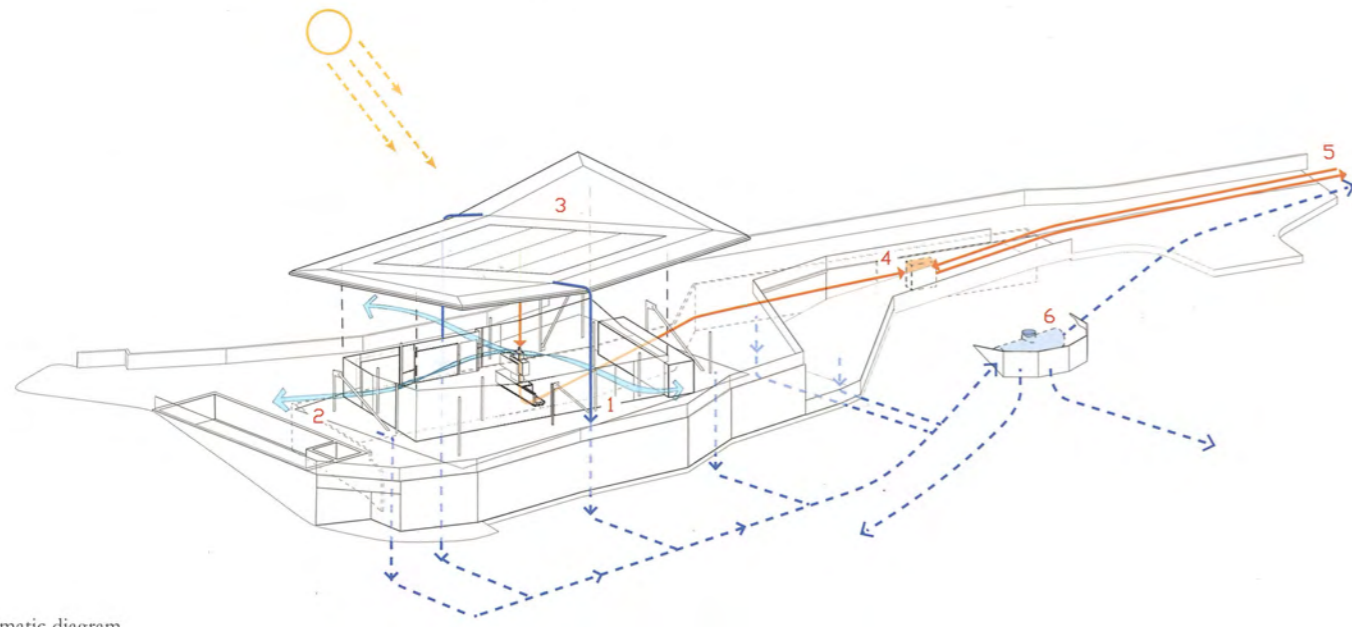
Building view from north - Scale 1:500



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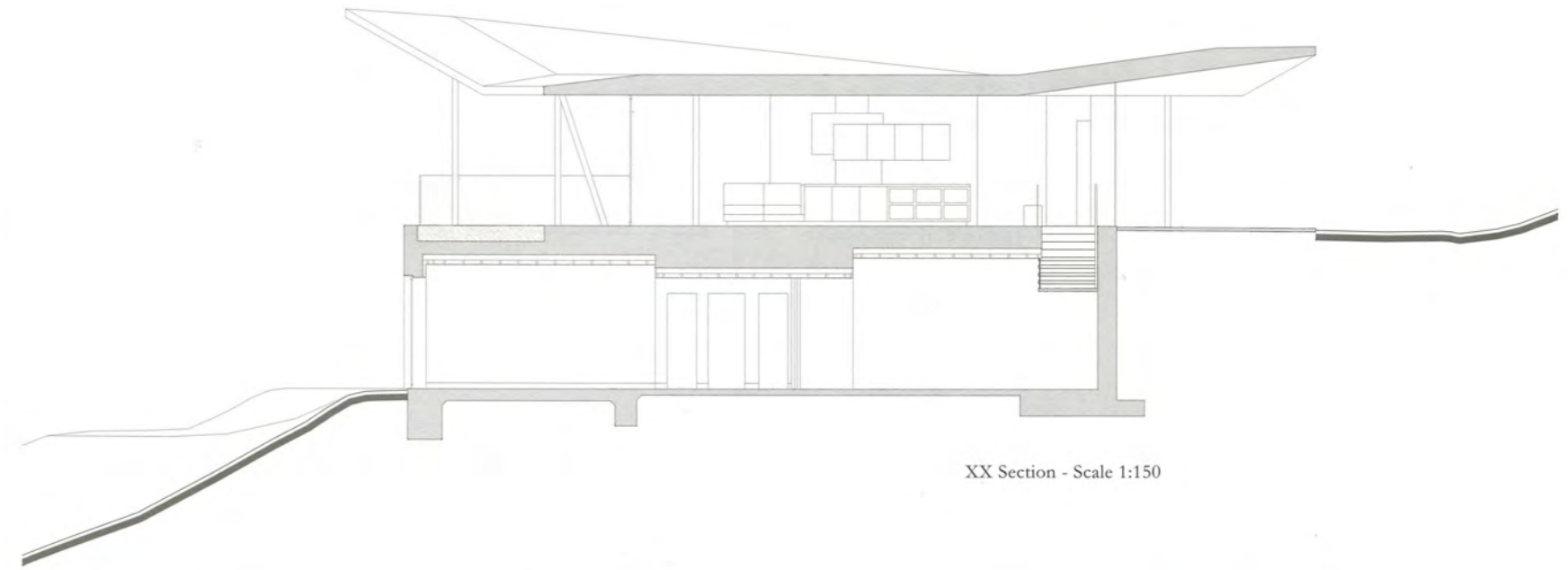


Early conceptual study model

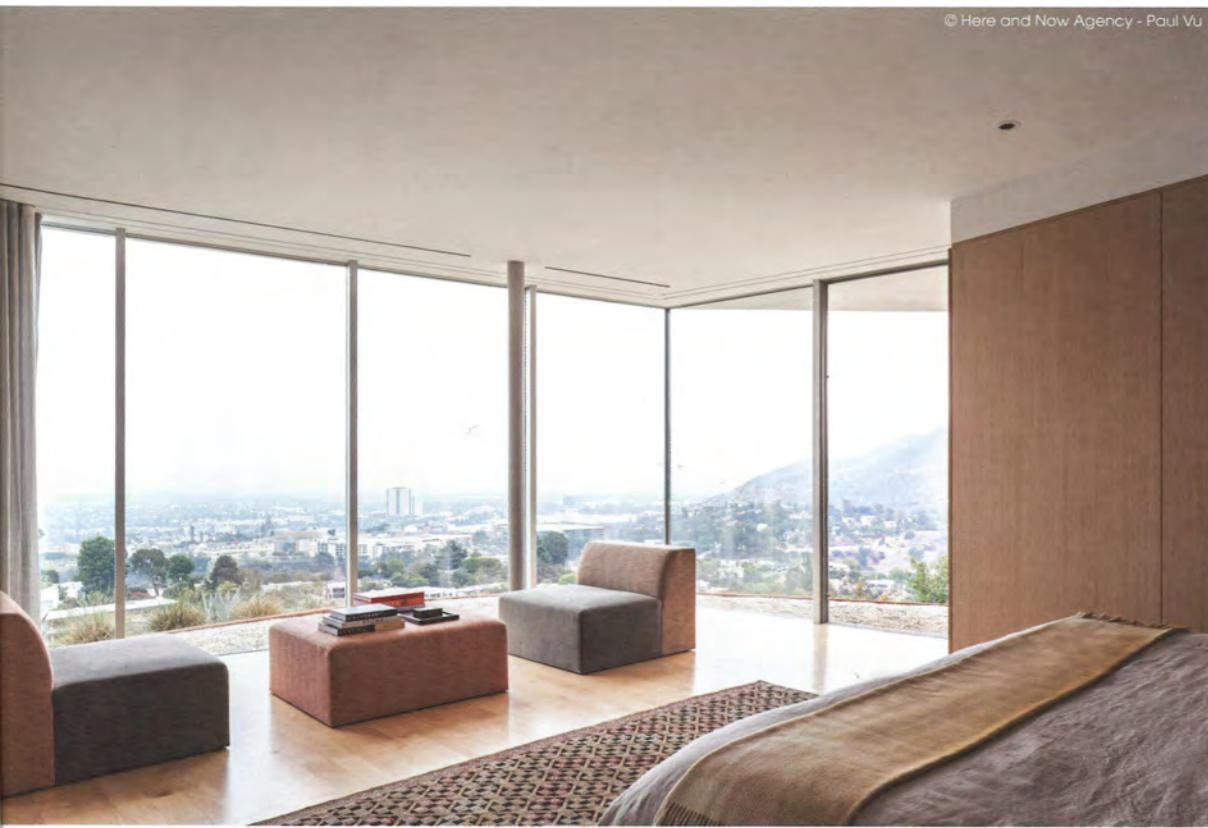


Bioclimatic diagram

- | | | |
|--|---|---|
| 1- Large sliding doors allow for cross ventilation | space for solar panels | based on Market conditions |
| 2- Thermal mass of earth at lower level helps to regulate temperatures | 4- Generated electricity is stored for emergency backups and used to balance out peak loads | 6- Stormwater is collected and stored on site and is used for drip irrigation |
| 3- The large roof provides solar shading and ample | 5- Electricity is bought from and sold to the grid | |



XX Section - Scale 1:150



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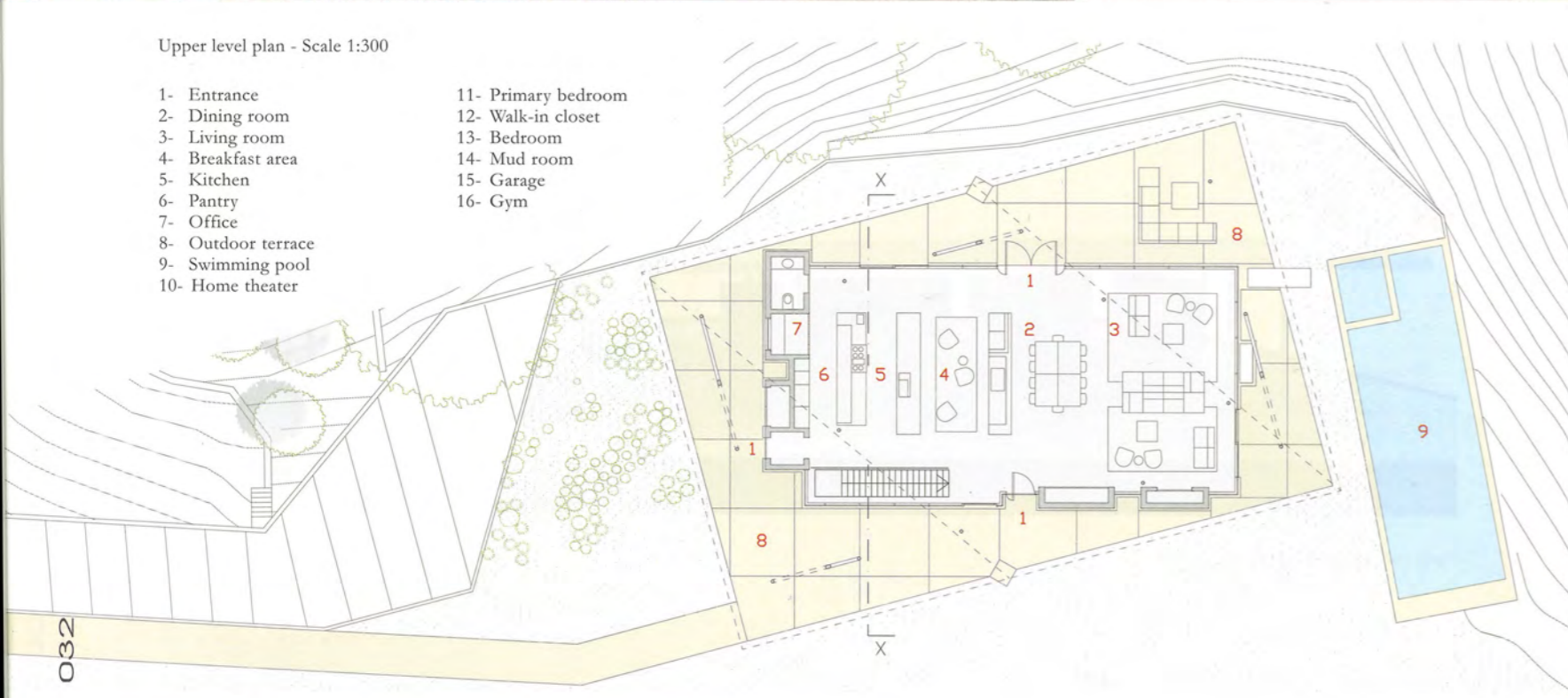
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Upper level plan - Scale 1:300

- | | |
|--------------------|---------------------|
| 1- Entrance | 11- Primary bedroom |
| 2- Dining room | 12- Walk-in closet |
| 3- Living room | 13- Bedroom |
| 4- Breakfast area | 14- Mud room |
| 5- Kitchen | 15- Garage |
| 6- Pantry | 16- Gym |
| 7- Office | |
| 8- Outdoor terrace | |
| 9- Swimming pool | |
| 10- Home theater | |



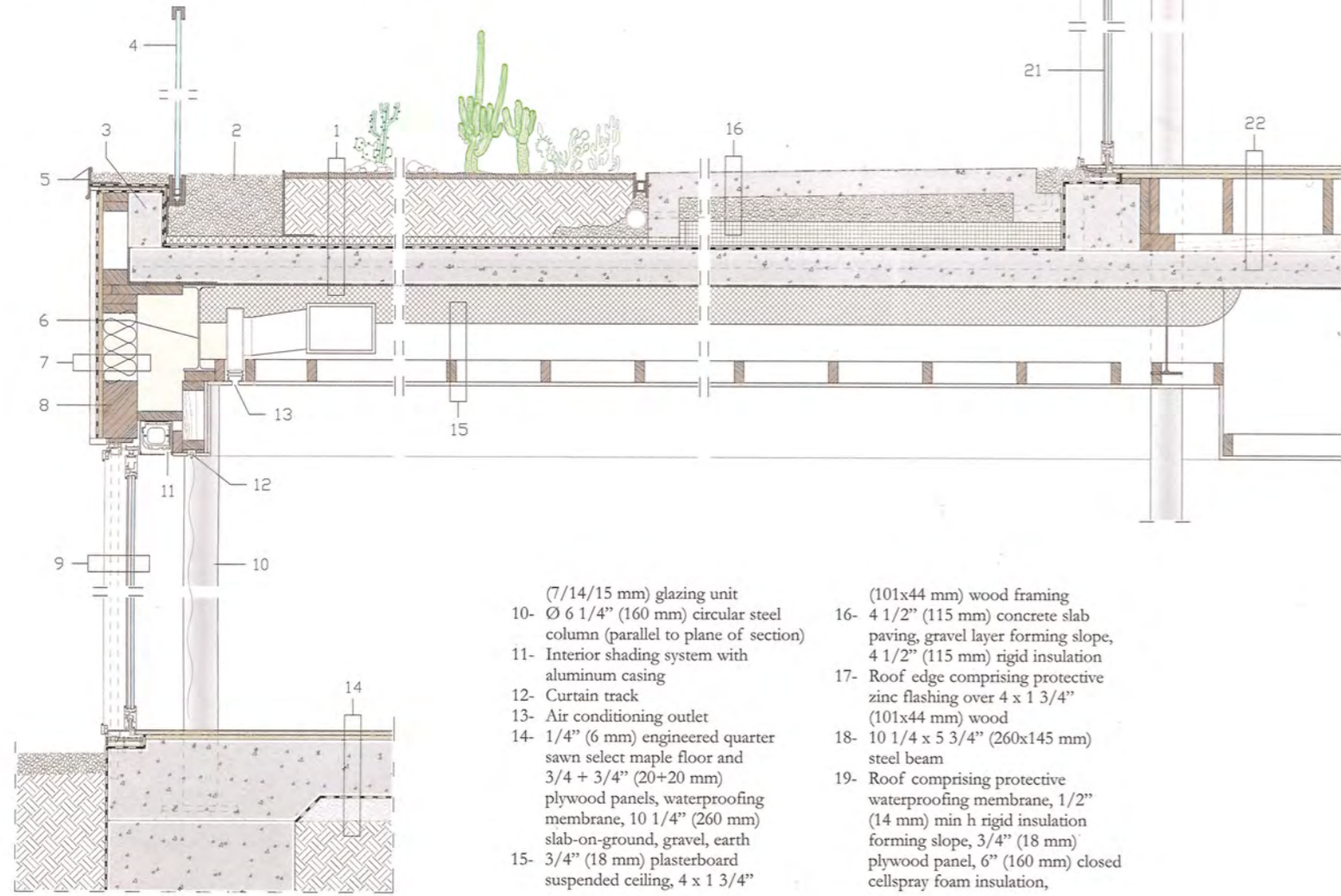
Lower level plan - Scale 1:300



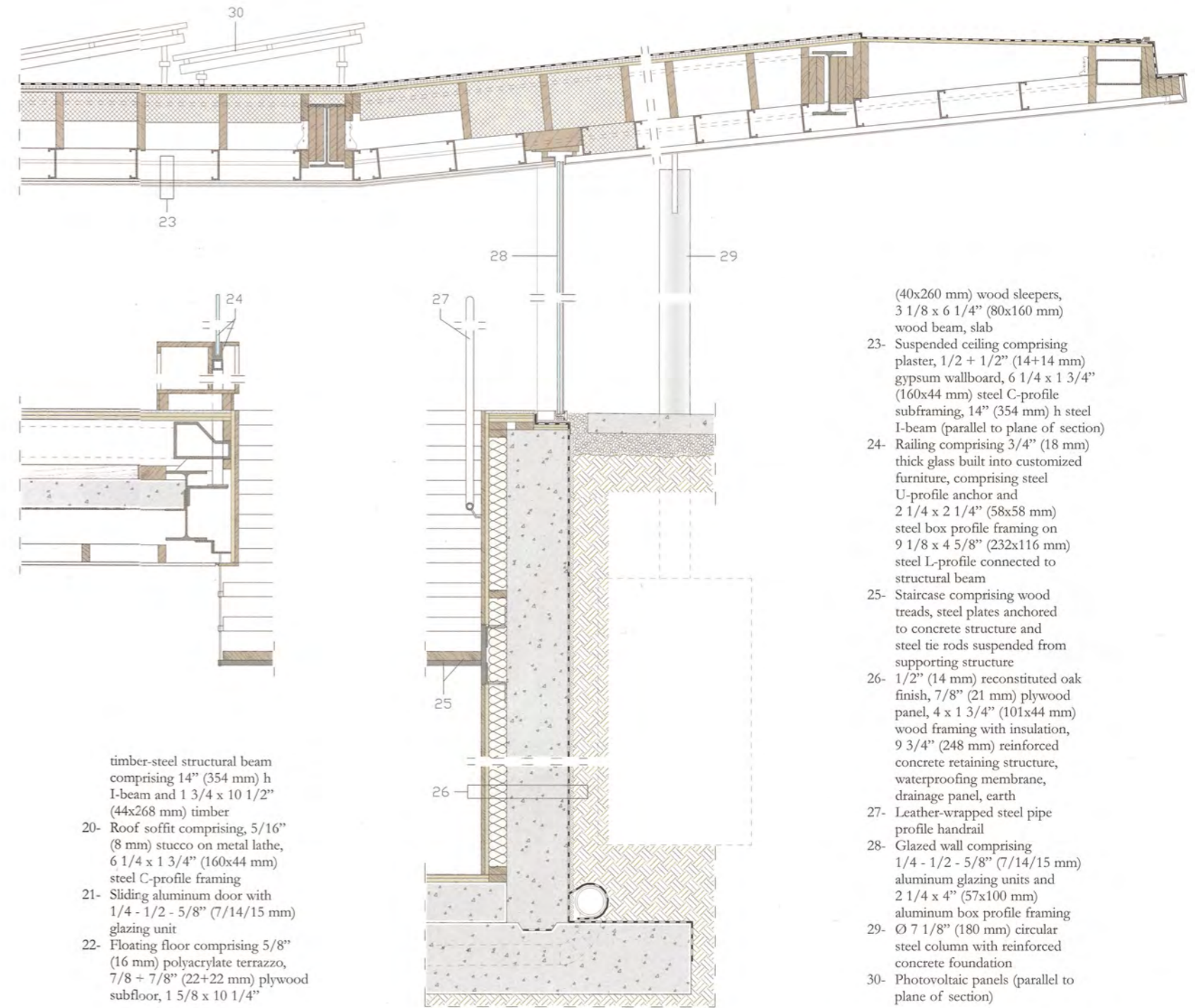
Detail A: Construction system
Vertical section - Scale 1:30

- 1- Green roof comprising layer of soil with 12 x 5 3/4" (305x145 mm) steel L-profile curbing, water retention mat, root barrier, waterproofing membrane, 16 x 6 7/8" (405x175 mm) composite slab of concrete fill over corrugated steel decking with steel L-profile framing
- 2- Gravel around garden perimeter
- 3- 6 1/4 x 10 1/4" (160x260 mm) reinforced concrete edge

- 4- Glass railing with steel profile anchors
- 5- 5 3/4 x 2 3/4" (145x70 mm) steel L-profile curbing with steel protective flashing
- 6- 15 3/4" (400 mm) h steel structural I-beam
- 7- Exterior finish comprising stucco, vapor barrier, 7/8" (22 mm) plywood panel, 6 1/4 x 1 3/4" (160x44 mm) wood framing
- 8- 6 1/4 x 10 5/8" (160x270 mm) header beam
- 9- Insect screen, sliding aluminum door with 1/4 - 1/2 - 5/8"



- 10- (7/14/15 mm) glazing unit
- 11- Ø 6 1/4" (160 mm) circular steel column (parallel to plane of section)
- 12- Interior shading system with aluminum casing
- 13- Curtain track
- 14- Air conditioning outlet
- 15- 1/4" (6 mm) engineered quarter sawn select maple floor and 3/4 + 3/4" (20+20 mm) plywood panels, waterproofing membrane, 10 1/4" (260 mm) slab-on-ground, gravel, earth
- 16- 3/4" (18 mm) plasterboard suspended ceiling, 4 x 1 3/4" (101x44 mm) wood framing
- 17- 4 1/2" (115 mm) concrete slab paving, gravel layer forming slope, 4 1/2" (115 mm) rigid insulation
- 18- 4 1/2" (115 mm) rigid insulation (101x44 mm) wood
- 19- 10 1/4 x 5 3/4" (260x145 mm) steel beam
- 20- Roof edge comprising protective zinc flashing over 4 x 1 3/4" (101x44 mm) wood
- 21- 10 1/4 x 5 3/4" (260x145 mm) steel beam
- 22- Roof comprising protective waterproofing membrane, 1/2" (14 mm) min h rigid insulation forming slope, 3/4" (18 mm) plywood panel, 6" (160 mm) closed cellspray foam insulation,



- 23- (40x260 mm) wood sleepers, 3 1/8 x 6 1/4" (80x160 mm) wood beam, slab
- 24- Suspended ceiling comprising plaster, 1/2 + 1/2" (14+14 mm) gypsum wallboard, 6 1/4 x 1 3/4" (160x44 mm) steel C-profile subframing, 14" (354 mm) h steel I-beam (parallel to plane of section)
- 25- Railing comprising 3/4" (18 mm) thick glass built into customized furniture, comprising steel U-profile anchor and 2 1/4 x 2 1/4" (58x58 mm) steel box profile framing on 9 1/8 x 4 5/8" (232x116 mm) steel L-profile connected to structural beam
- 26- Staircase comprising wood treads, steel plates anchored to concrete structure and steel tie rods suspended from supporting structure
- 27- 1/2" (14 mm) reconstituted oak finish, 7/8" (21 mm) plywood panel, 4 x 1 3/4" (101x44 mm) wood framing with insulation, 9 3/4" (248 mm) reinforced concrete retaining structure, waterproofing membrane, drainage panel, earth
- 28- Leather-wrapped steel pipe profile handrail
- 29- Glazed wall comprising 1/4 - 1/2 - 5/8" (7/14/15 mm) aluminum glazing units and 2 1/4 x 4" (57x100 mm) aluminum box profile framing
- 30- Ø 7 1/8" (180 mm) circular steel column with reinforced concrete foundation
- 31- Photovoltaic panels (parallel to plane of section)



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CREDITS

Location: Los Angeles, California, USA - **Gross Floor Plan:** 695 m² - **Architecture and Construction:** GLUCK+

Consultants

Civil and Structural: Peck - **Geotechnical:** Schick Geotechnical - **Mechanical:** IBC Engineering Services, CES Engineering - **Lighting Design:** Lux Populi - **Interior Design:** Insight Environmental Design - **Landscape:** Hoerr Schaudt - **Expeditior:** Kimberlina Whettam and Associates

Portrait image: Julia Hembree Smith
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