



Photolab House.

The Photolab House is an image production facility and residence. It was designed during Jurg Lang's "steel house" studio in Winter 2004.

The hypothetical client is Mr. Henry Vision, an architectural photographer of the highest caliber. Thanks to a studied, disciplined approach to research and an uncanny eye for novelty, his ability to find significant details in architectural projects unnoticed even by the designers who created them grants him a privileged, intimate relationship with this city's architects, who find invaluable Mr. Vision's ability to enhance their work and their reputations through the power of his lens.

It is of course possible for a photographer to single-handedly define an architectural movement. Mr. Vision's close involvement with the best architects of his day elevates him to something like a godlike status; every high-profile project in the city becomes his project as well. Mr. Vision is a prophet who disseminates the images that generations of architects will study and internalize.

Naturally, the meager efforts of mere architects are

demystified before Mr. Vision's eyes; to him, all buildings are objectified, distilled down to a two-dimensional silver-halide proposition with its own inherent value. The buildings themselves are neutral, equally providing fodder for his imagination whether good or bad.

For Mr. Vision, this moral equivalence leads to a fascination with the vernacular, buildings that are willing to appear in his photographs but without the interference of an architect self-consciously stuffing them full of ideas. The Photolab House incorporates the Butler-type prefabricated steel bent, an efficient expression of the forces taken up by a building whose graceful arch has tended to be ignored by architects.

The Photolab house has also drawn lessons from legitimate architecture, such as Case Study House 16 shown here with its façade composed of translucency and carparking, but it is the humble, quasi-modern dingbat, found all over the Westside, that instructs us on how to turn the diagram of Case Study 16 on its side in an urban context.

Winter 2004.
Studio instructor: Jurg Lang.
Rendered with FormZ.

photolabhouse



The hypothetical client, Mr. Vision.



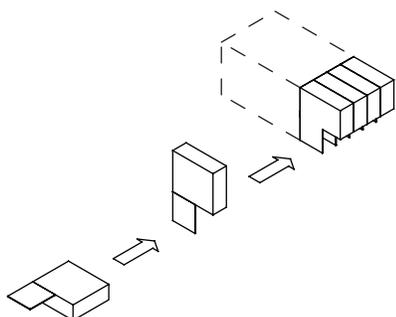
The Butler prefabricated arch, a precedent.



Far left, top: Craig Ellwood's Case Study House 16, a precedent.

Far left, bottom: the dingbat as a rotation of the CSH 16 diagram.

Near left: the local context, exemplary dingbats.



The site is on a small residential street in the Palms section of West Los Angeles, in a neighborhood where traditional small houses and duplexes have mainly been replaced by dingbats or augmented with apartment buildings in the backs of the lots. The Photolab House tries to fit in, sort of.

Mr. Vision loves his work as an architectural photographer so much that he would do it even if it didn't pay, and his refusal to buy into the traditional distinction between work and life means that program drives the organization of this house more than usual. An analysis of what an architectural photographer does led to the creation of specialized rooms to promote Mr. Vision's work. These rooms include a darkroom, a library, and two distinct flexible spaces targeted to different work tasks. The organization of the house reflects and seeks to enhance this unusual live-work arrangement.



Left: Context montage rendering. Rendered with FormZ, Photoshop.



Location map. Francis Place, a residential street on which the existing single family homes and duplexes have been replaced by dingbats and augmented with apartment buildings on their rear halves.

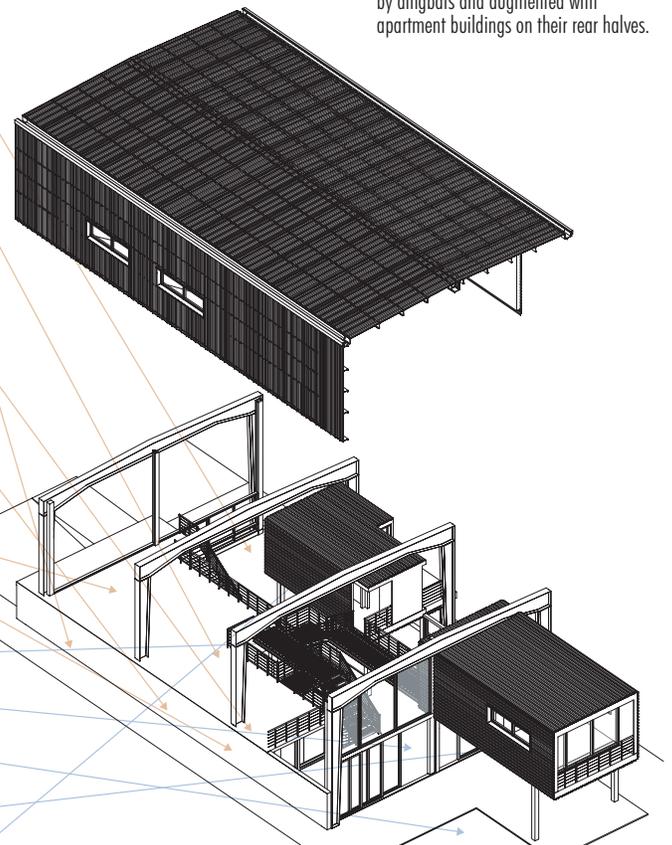
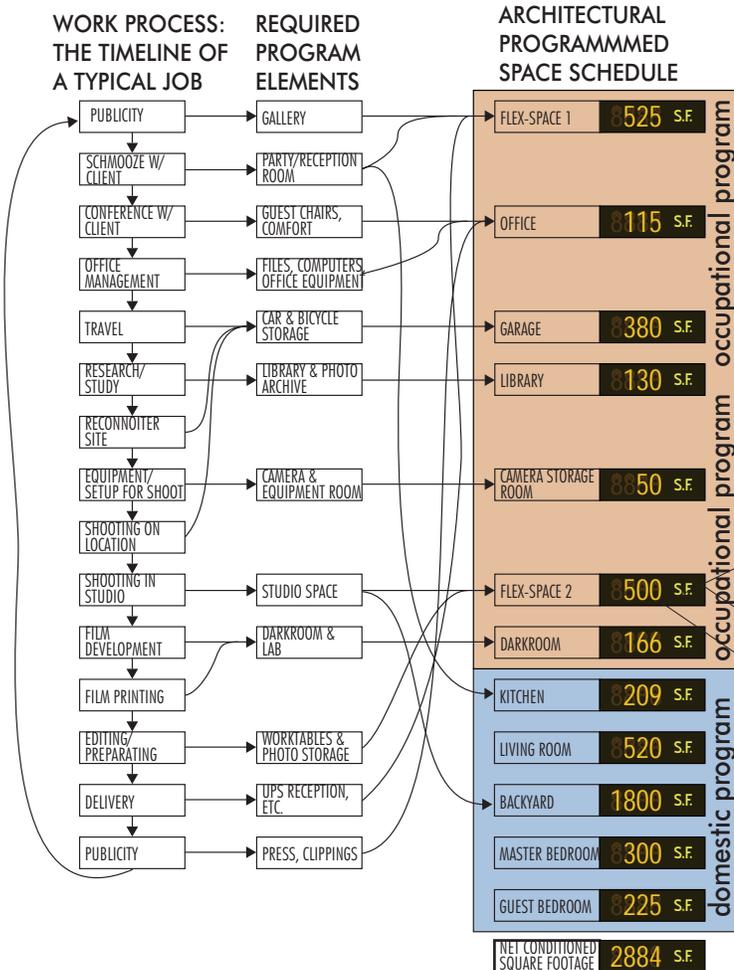


Diagram demonstrating relationship between client's work and program elements, area of programmed spaces, and location. Hidden line drawing: FormZ.

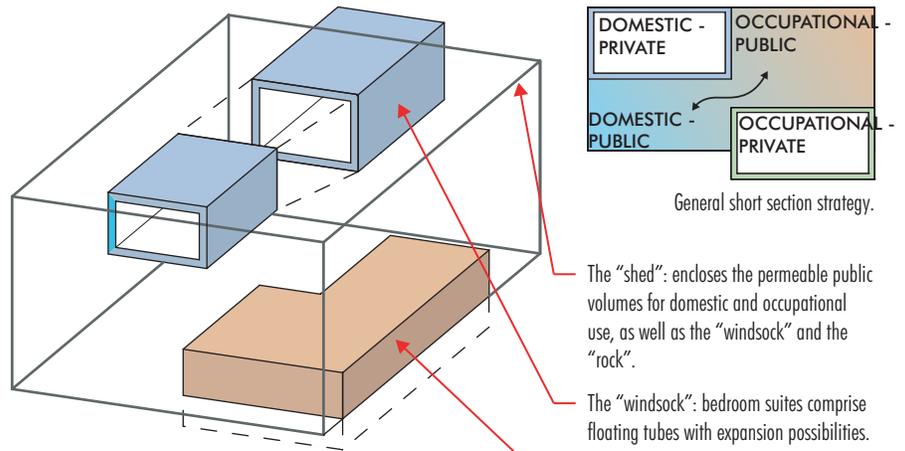
The program is organized according to a few simple ideas: private domestic and occupational spaces are segregated and staggered while the public spaces flow freely together. The strategy comprises elements termed "the shed", which envelops and unites everything under one roof; "the rock", a heavy, sunken element bringing together garage and workspaces above and within; and "the windsock", bedroom suites presented as a floating tube or tubes.

The house is divided through its center in both plan and section by a central spine. This circulation and service core both divides volumes and links them, and is bridged by a perforated metal catwalk carrying building services in its underside, visibly linking program and utility elements together.

The site strategy reflects a formal, enclosed front giving way to a more informal and open back.

The versatility of Photolab House promotes Mr. Vision's work and gives him the same high performance he would demand from any other tool for imaging. This versatility is exemplified by the front façade.

Photolab House's normal countenance is inscrutable and mute, a version of Case Study House 16 on steroids; here we are choosing to reject the old saw of the house as camera, because in this case it is the photographer's job to set the views, not the house's. But when the translucent garage doors that make up the front façade roll up, the house exhibits a more welcoming social aspect, still providing security and privacy to first floor living spaces, but allowing serious natural ventilation and light into the studio space. At night, the house will typically exhibit a luminous glow, but the translucent material allows the doors to be used as projection screens for an audience either inside or outside.



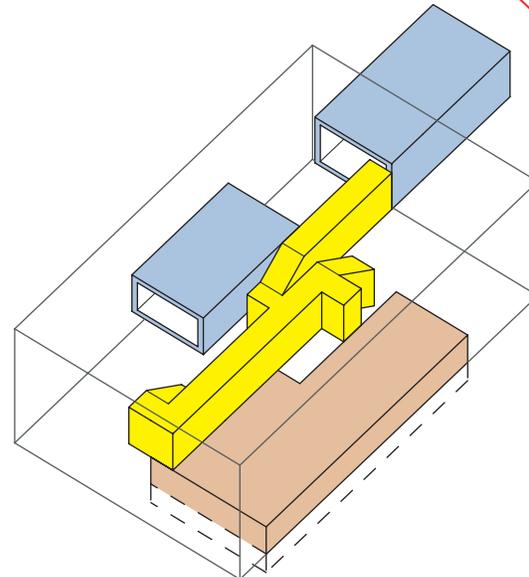
General short section strategy.

The "shed": encloses the permeable public volumes for domestic and occupational use, as well as the "windsock" and the "rock".

The "windsock": bedroom suites comprise floating tubes with expansion possibilities.

The "rock": workspaces occupy areas within and above a heavy concrete base.

Upper left: program strategy axonometric diagram.



The house is divided through its center in both plan and section by a central spine. This circulation and service core both divides volumes and links them, and is bridged by a perforated metal catwalk carrying building services in its underside, visibly linking program and utility elements together.

Left: circulation and service spine diagram.

Adjustable front facade.
Renderings by FormZ.

Far left: ordinary mute facade for discreet internal focus and light control.

Near left: possibility of rolling up front facade for serious natural ventilation, additional natural light for photo studio space, and a more welcoming social aspect when required while maintaining privacy and security for living spaces.

Far left: translucent facade allows house to present itself as a lightbox at night.

Near left: translucent material permits function of doors as projection screens with a potential audience both inside and outside the house.



Within the house, the wide open spaces permit flexible use. The second floor flex space shown here is used as a studio and workshop, while the first floor flex space below is used as a gallery, screening room, and reception hall. The bedroom pods hover above and define the space below.

The renderings below depicts how the work spaces relate to the living room area, with the darkroom sunken 4' below grade, separated from the living room by adjustable tinted, double-polarized glass; the library above it, and the perforated metal catwalks traversing the space. From the rear, glazed walls open to permit a free-flowing relationship between indoors and outdoors and the projecting bedroom suite provides a deep overhang.



Architecture Burger logo created in conjunction with Photolab House project.

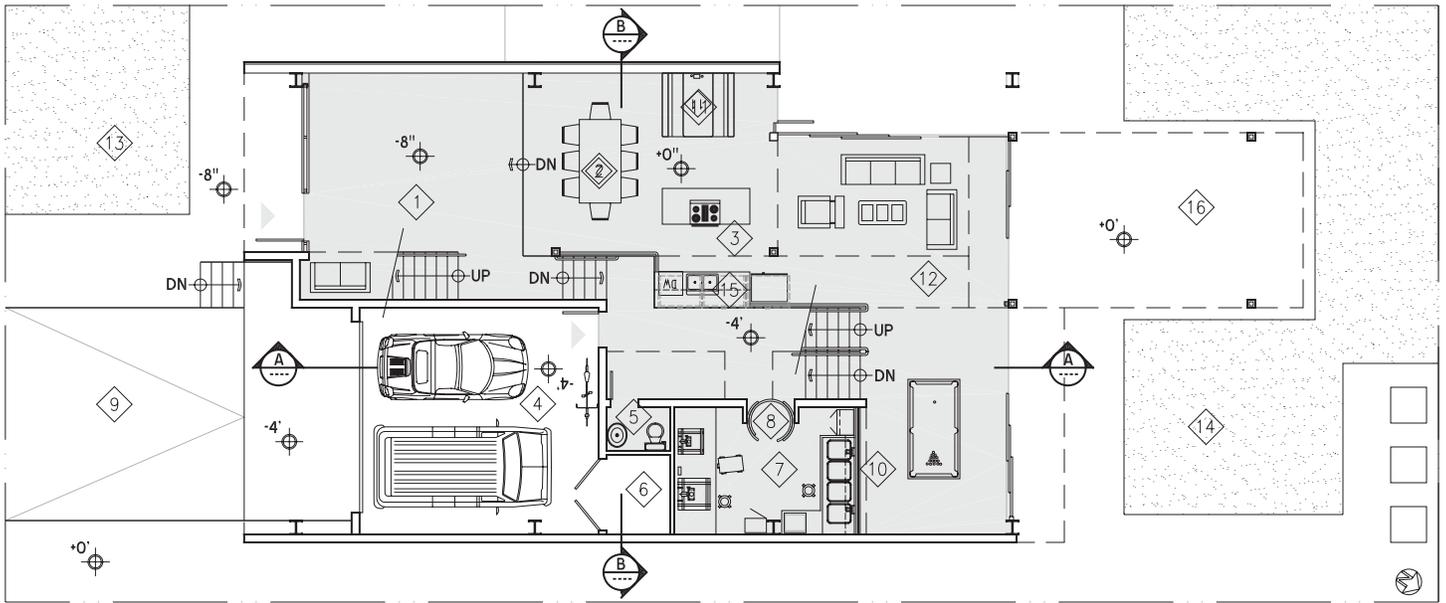


Left: view looking back towards house from flex space 2. Rendered with FormZ.

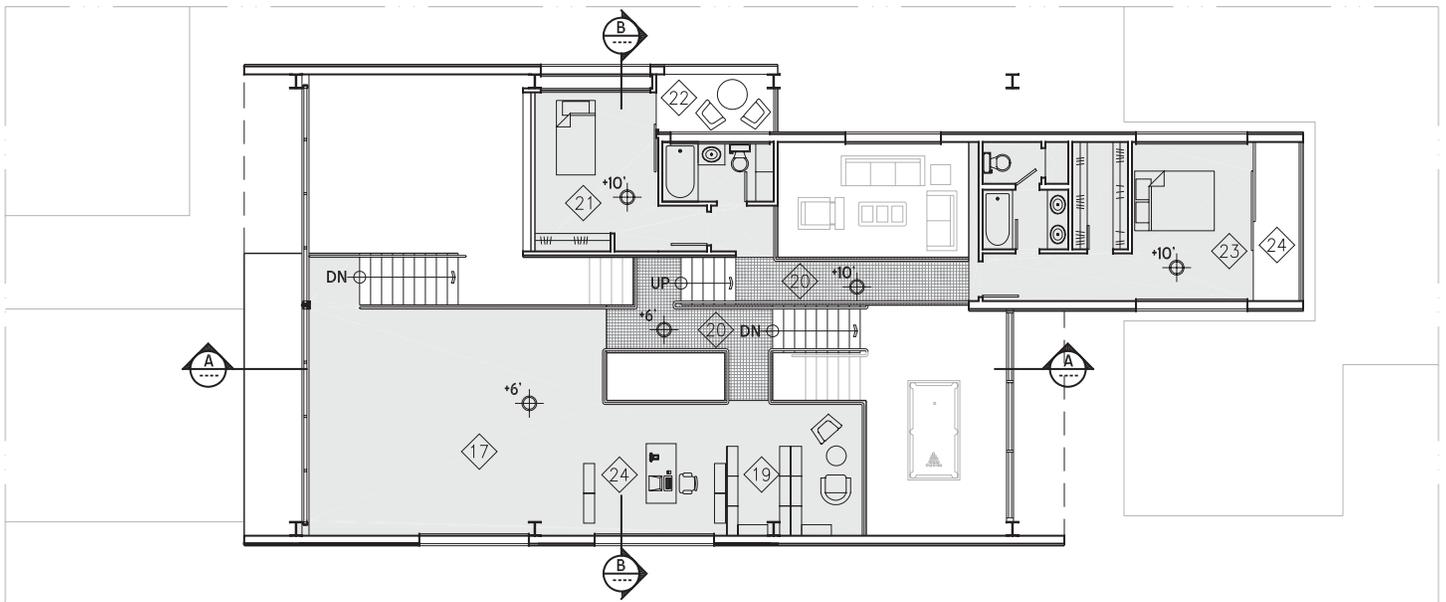


Above: renderings of rear of house and backyard.

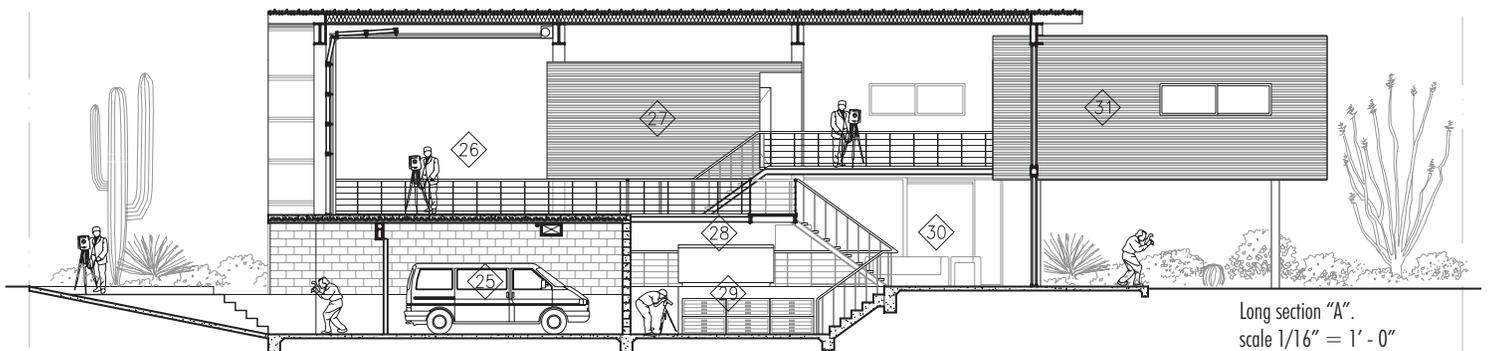
Left: view looking forward toward kitchen and work space from living room. Rendered with FormZ.



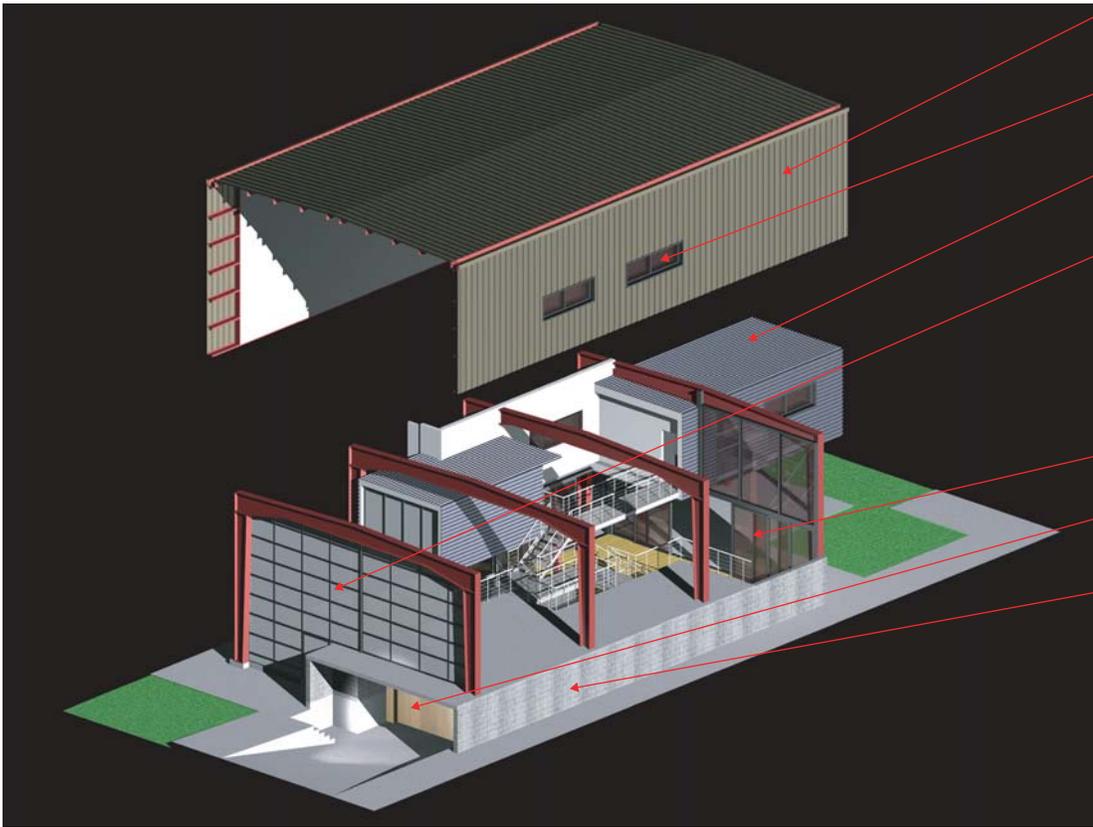
First floor plan.
 scale 1/16" = 1' - 0"
 Drawn with AutoCAD.



Second floor plan.
 scale 1/16" = 1' - 0"
 Drawn with AutoCAD.



Long section "A".
 scale 1/16" = 1' - 0"
 Drawn with AutoCAD.

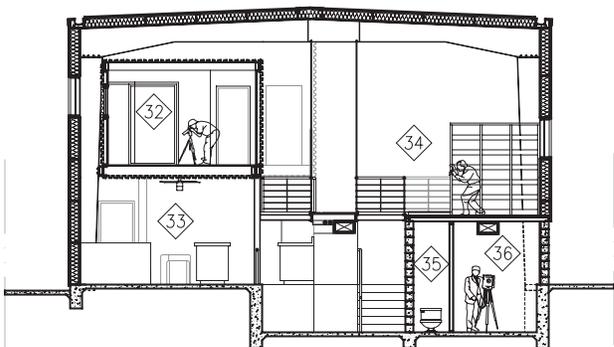


- Butlerib-II corrugated steel cladding over walls and roof with hidden gutter, exposed eaves and gypsum-board panel at interior.
- Side windows inset 8" from outside of wall: providing the virtues of sunshade and lightshelf.
- Clear-anodized aluminum corrugated truck siding horizontal over bedroom units all-around.
- Front wall composed of two industrial roll-up doors clad with translucent insulated fiberglass panels. When closed, permits entry of diffuse light and serves as projection surface visible from both inside and outside, and protects privacy of inside; when open, doors provide ventilation and open house to street.
- Green-tinted insulated low-e glass and sliding doors at side and rear of house.
- Grooved, unfinished exterior-grade plywood siding over garage door and frame.
- Exposed concrete block from 0' to 5' provides thermal mass temperature stabilization to darkroom area, and rigid surface for wall-mounting sensitive equipment.

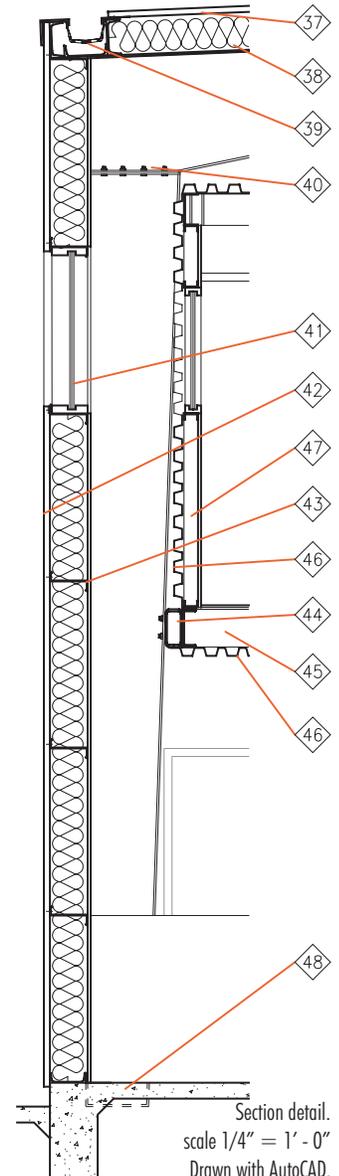
Drawing notes:

1. flex-space 1 - gallery, screening room, parties, foyer
2. flex-space 1 / dining
3. kitchen
4. garage
5. powder room
6. HVAC equipment room
7. darkroom / photolab
8. airlock / lightlock
9. driveway sloped down 4'
10. red-tinted glass wall with dual polarizing windows permit adjusting light transmission for natural safelighting
11. diner-style booth
12. living room
13. native plant landscaped front yard
14. native plant landscaped back yard
15. flat files under kitchen counter
16. hardscaped back porch
17. flex-space 2 : studio, storage, workroom
18. office
19. library
20. catwalk
21. second bedroom
22. deck at second bedroom

23. master bedroom suite
24. balcony at master bedroom
25. garage
26. flex space 2 : photo studio, storage, workroom
27. bedroom beyond
28. kitchen beyond
29. flat files
30. living room
31. master bedroom beyond
32. bedroom 2 beyond
33. flex space 1 / dining
34. office
35. powder room
36. HVAC equipment room
37. Butlerib-II corrugated steel roof "country wheat" color over Butler Z-purlins, 9 1/2" depth
38. batt insulation over gypsumboard ceiling
39. concealed gutter sloped to downspouts at ends
40. prefabricated steel bent with bolted moment connection
41. double-pane sliding window
42. Butlerib II corrugated steel wall cladding "country wheat" color
43. Butler z-girts, 9 1/2" depth, predrilled and through-bolted to flange of bents
44. 10" steel tube through-bolted to bents
45. lightweight 10" steel joists with steel channel hanger and stiffeners
46. clear-anodized aluminum corrugated truck siding
47. 2x4 steel studs with gypsumboard interior cladding
48. bents bolted to levelling plate over concrete footing; slab floor overpoured



Short section "B".
scale 1/16" = 1' - 0"
Drawn with AutoCAD.



Section detail.
scale 1/4" = 1' - 0"
Drawn with AutoCAD.