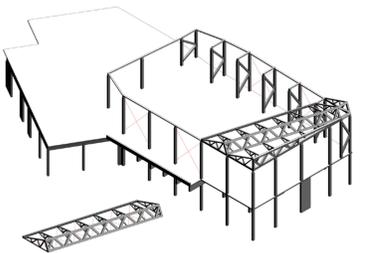


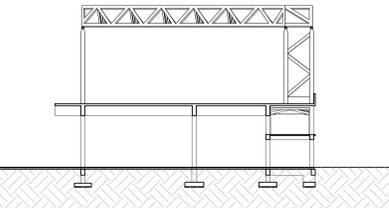
- Existing construction is coloured in red
- | | | |
|--|--|---|
| <ul style="list-style-type: none"> 1 - 150mm sandwich panel from Triple Solar with integrated solar collector (solar energy is collected and stored in hot water tank and used to heat swimming pools and underfloor systems) - 175x50 mm rafters (spanning 3,4 m) in-filled with insulation - Vapour control layer - 12mm plywood internal finish | <ul style="list-style-type: none"> 9 - Cobble paving laid on sand | <ul style="list-style-type: none"> 15 - Internal acoustic panels - Prefabricated panels of 20x40 mm battens 35x45 counter battens with 20mm acoustic insulation between them |
| <ul style="list-style-type: none"> 2 - 40mm thick polycarbonate panels | <ul style="list-style-type: none"> 10 - Reclaimed carpet tile - 18mm OSB sub-flooring - Vapour control layer - 100mm rigid insulation - Damp proof membrane - Existing construction below | <ul style="list-style-type: none"> 16 - 400x300mm glulam column |
| <ul style="list-style-type: none"> 3 - Double glazed timber window | <ul style="list-style-type: none"> 11 - Wide throw hinges allow the doors to be opened 180 degrees. | <ul style="list-style-type: none"> 17 - Steel cross bracing |
| <ul style="list-style-type: none"> 4 - Automated dampers control level of natural ventilation | <ul style="list-style-type: none"> 12 - 150x 20mm Accoya treated Radiata Pine - 42x42mm vertical battens - Breather membrane - 12mm plywood sheathing board - 250mm timber frame with insulation infill - 50x50mm counter battens with insulation infill - Vapour control layer - 12mm plywood internal finish | <ul style="list-style-type: none"> 18 - Timber truss made from 180x50 solid timber members bolted together as shown in detail 6 |
| <ul style="list-style-type: none"> 5 - Radiator under bench heats incoming air | <ul style="list-style-type: none"> 13 - Reclaimed ceramic tiles hung on - 25x50mm horizontal counter battens - 50x50mm vertical battens - Breather membrane - 12mm plywood sheathing board - 250mm timber frame with insulation infill - 50x50mm counter battens with insulation infill - Vapour control layer - 12mm plywood internal finish | <ul style="list-style-type: none"> 19 - 200mm thick concrete slab cut from recovered concrete of the demolished sections of the shopping centre. |
| <ul style="list-style-type: none"> 6 - 40mm concrete tiles resting on supporting feet - Single ply water proof membrane - 150mm rigid insulation - Existing concrete slab | <ul style="list-style-type: none"> 14 - Reclaimed acoustic panels re painted and incorporated into suspended ceiling element. | <ul style="list-style-type: none"> 20 - Painted steel edging bolted to the concrete to protect its edge and the exposed rebar. |
| <ul style="list-style-type: none"> 7 - 22mm Sports flooring boards resting on - 27x27mm flex-beam battens - 10mm absorbing cradle - 250mm timber floor joists resting on existing concrete slab in-filled with: 30mm rigid insulation incorporating underfloor heating piping, resting on 9mm plywood with wool insulation below. | | <ul style="list-style-type: none"> 21 - Re-used masonry brick plinth tied to timber - construction behind - 50mm cavity - Breather membrane - 12mm plywood sheathing board - 250mm timber frame with insulation infill - 50mm counter battens with insulation infill - Vapour control layer - 12mm plywood internal finish |
| <ul style="list-style-type: none"> 8 - Large scale door with integrated ventilation dampers to allow for natural ventilation when the door is not left open. | | |

Existing construction is coloured in red

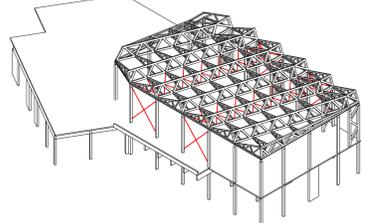
- 1 Automated open-able roof light
- 2 - 150mm sandwich panel from Triple Solar with integrated solar collector (solar energy is collected and stored in hot water tank and used to heat swimming pools and underfloor systems)
 - 175x50 mm rafters (spanning 3.4 m) in-filled with insulation
 - Vapour control layer
 - 12mm plywood internal finish
- 3 2.2 m deep timber truss made from 300x300mm glulam members and bolted steel plate connections spanning 21 m
- 4 LED down-lights run along the lower edge of the truss to provide lighting for the sports hall
- 5 Ventilation grill and automated dampers control the natural ventilation of the sports hall
- 6 Timber truss made from 180x50 solid timber members bolted together as shown
- 7 - 150x 20mm Accoya treated Radiata Pine
 - 42x42mm vertical battens
 - Breather membrane
 - 12mm plywood sheathing board
 - 250mm timber frame with insulation infill
 - 60x50mm counter battens with insulation infill
 - Vapour control layer
 - 12mm plywood internal finish
- 8 400x300mm glulam column
- 9 Large scale sliding door
- 10 Internal sliding screen (timber frame with rope net infill) to prevent balls escaping when the door is open.



The trusses can be pre-assembled and then craned on to the columns. Additional beams below the trusses are present between the columns enable for this construction sequence.



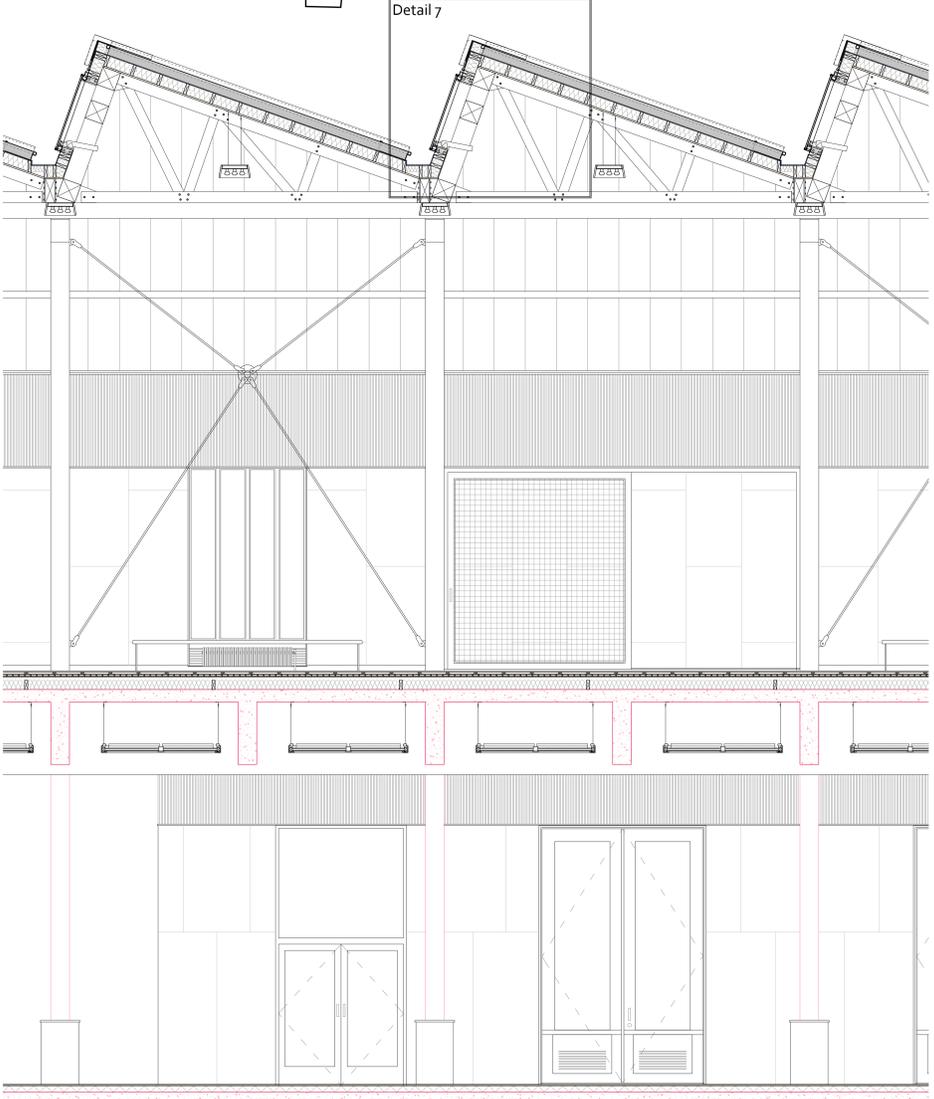
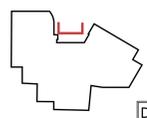
A vertical truss along the southern wall provides lateral support for the structure.



Cable cross bracing is present between the columns on the south and the north as shown, as well as within the roof structure that spans between them.

The timber plywood boards in the roof construction helps to provide further lateral stability once installed.

Internal Elevation



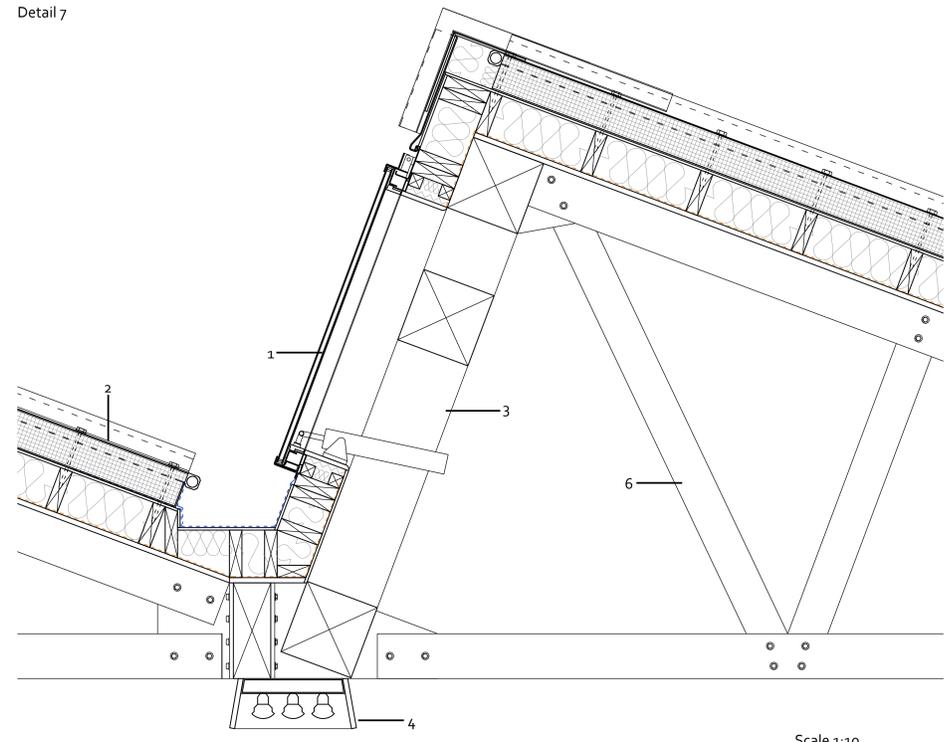
Scale 1:40

External Elevation



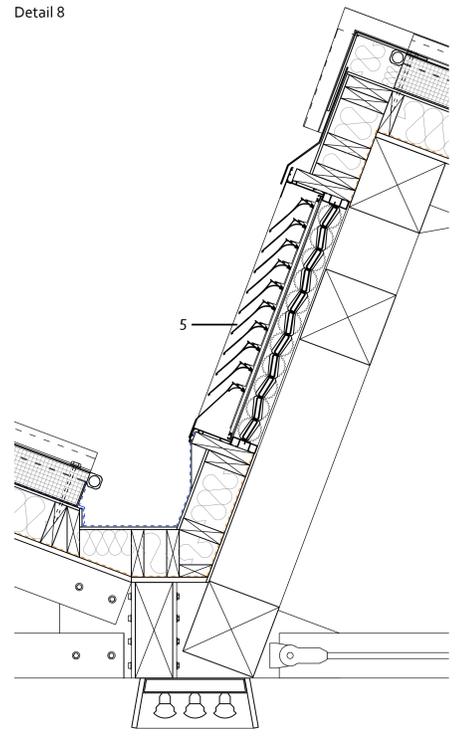
Scale 1:40

Detail 7

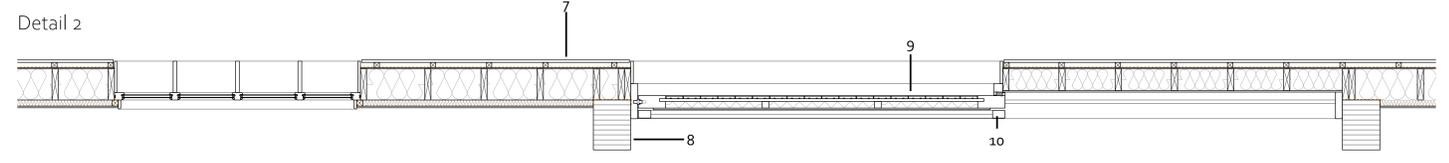


Scale 1:10

Detail 8

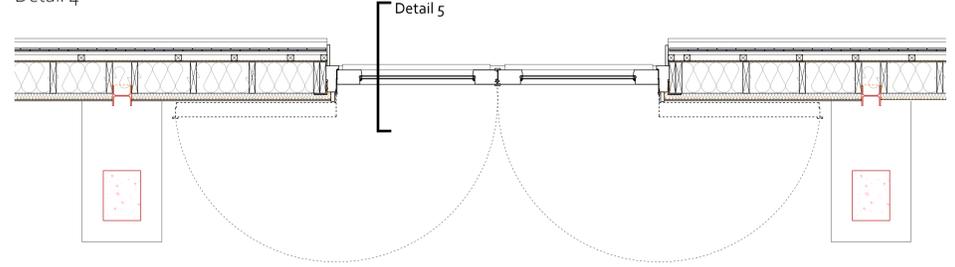


Detail 2



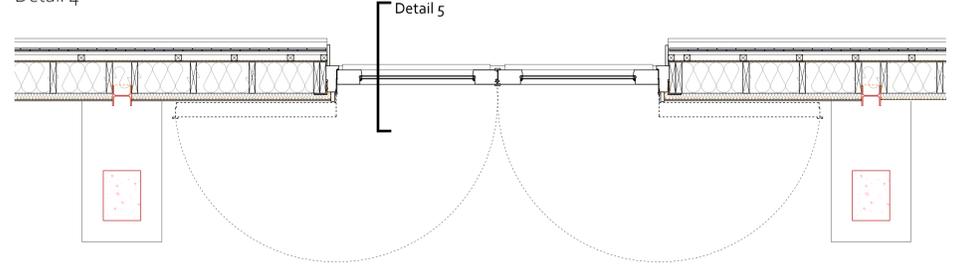
Scale 1:20

Detail 4

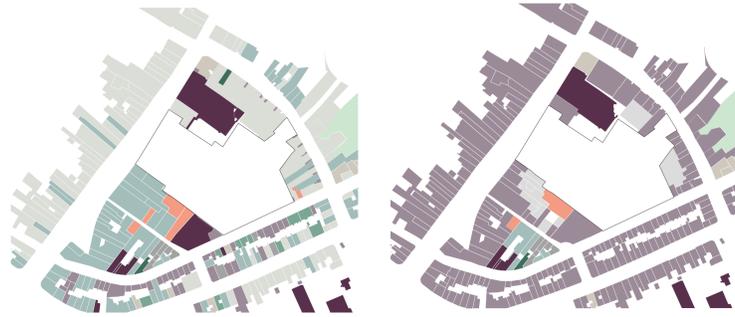
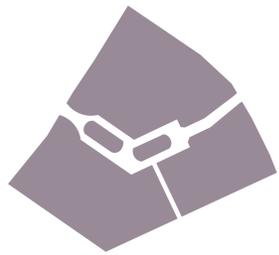


Scale 1:20

Detail 5

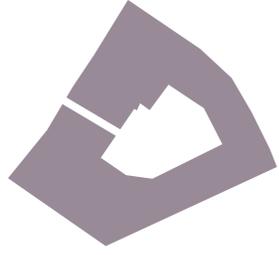


Urban Context

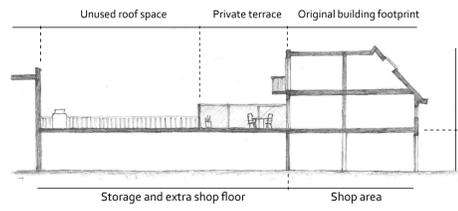


- Cafe/ Bar/ Restaurant
- Storage
- Shops
- Office
- Body/ Mind
- Art/ Exhibition
- Housing
- Derelict
- Roof
- Parking

The creation of an oasis in the city centre, an escape from the dominant consumerism of the area.



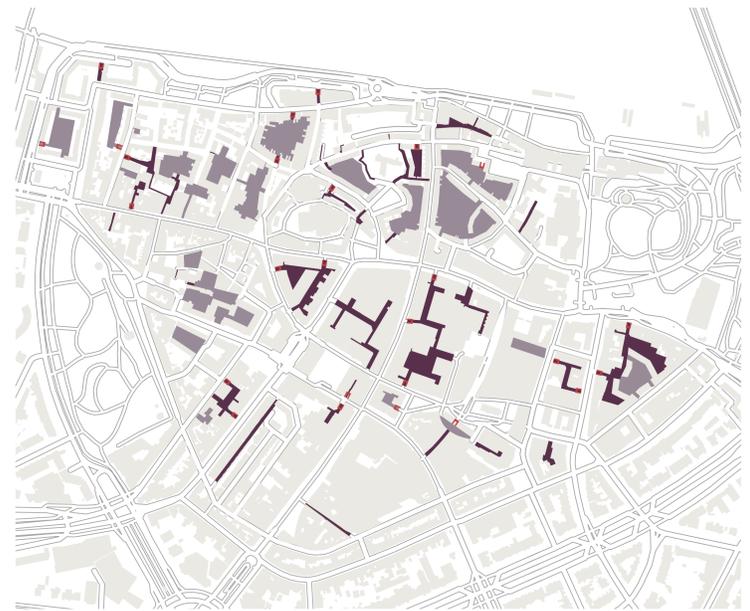
Typical adjoining building



Residential
Retail unit



Courtyard study



Ground level urban plan

1:750

- Parking
- Proposed Housing
- Proposed facilities
- Proposed retail units



Public, semi-public, private

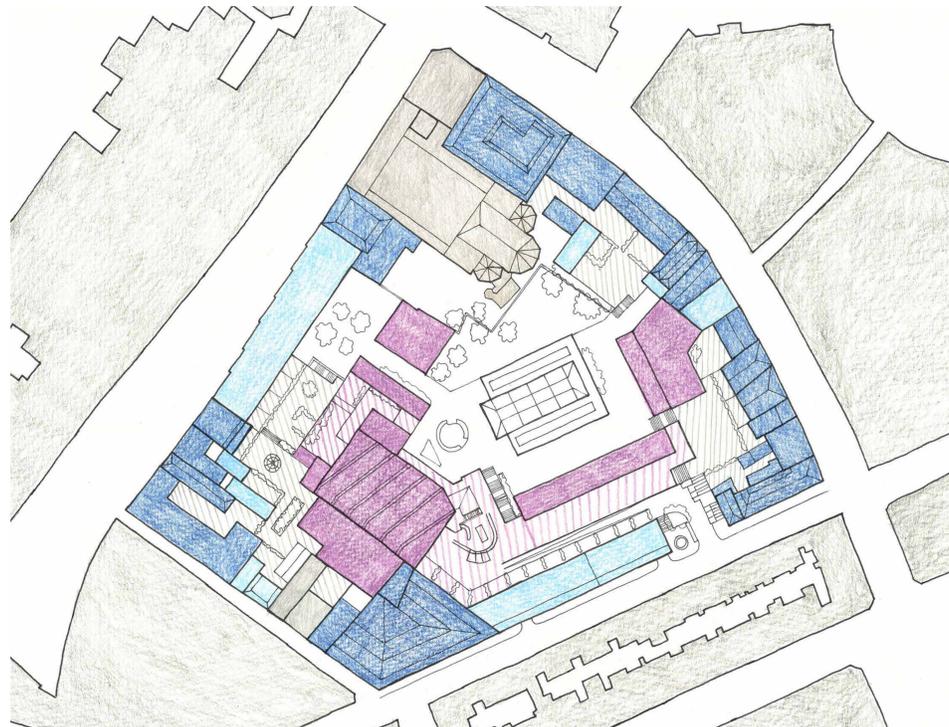
- Public
- Semi-public
- Private terrace



Roof level urban plan

1:750

- Existing housing
- Proposed Housing
- Proposed facilities
- Roof terrace
- Roof terrace (above proposed facilities)

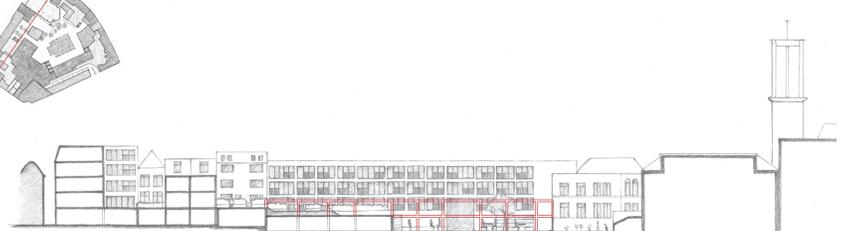


Demolition plan

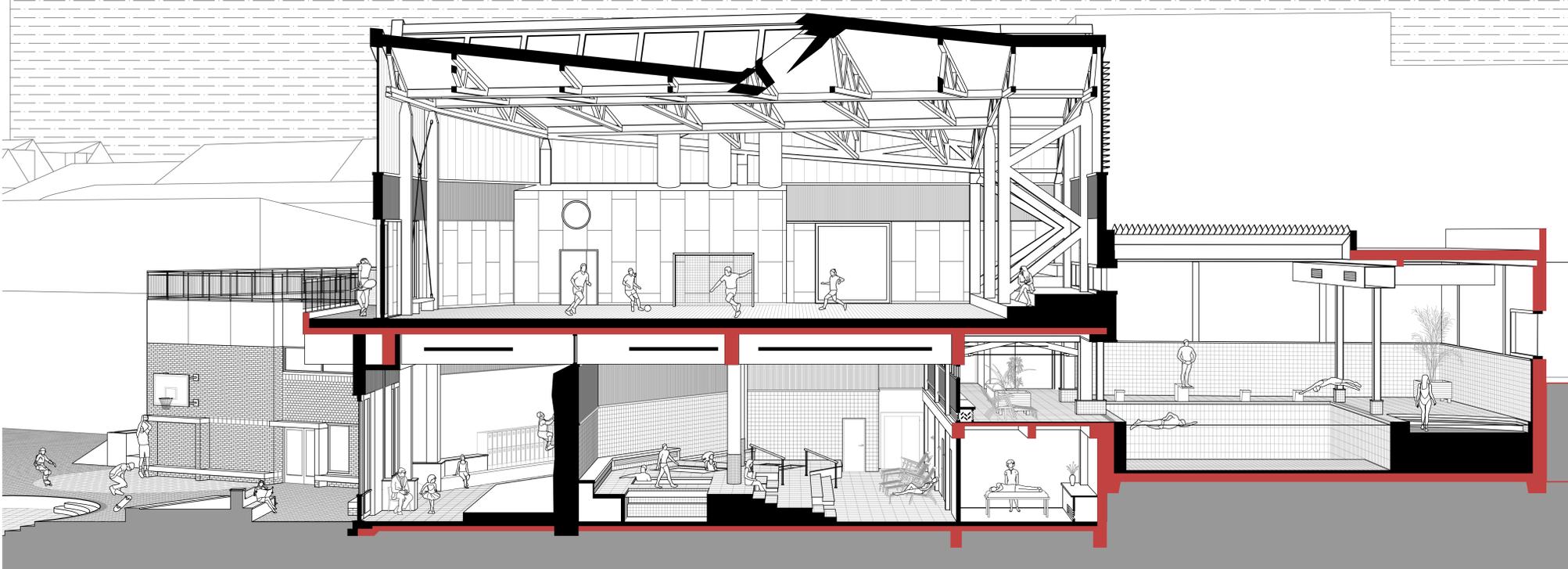
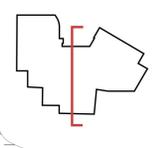
- Proposed building envelope
- Reused structure
- Demolished structure



Urban Sections 1:500



Shops with housing above | Roof terrace | Health and Wellness Centre | Central square | Winter garden event space | Child care | Shops with housing above



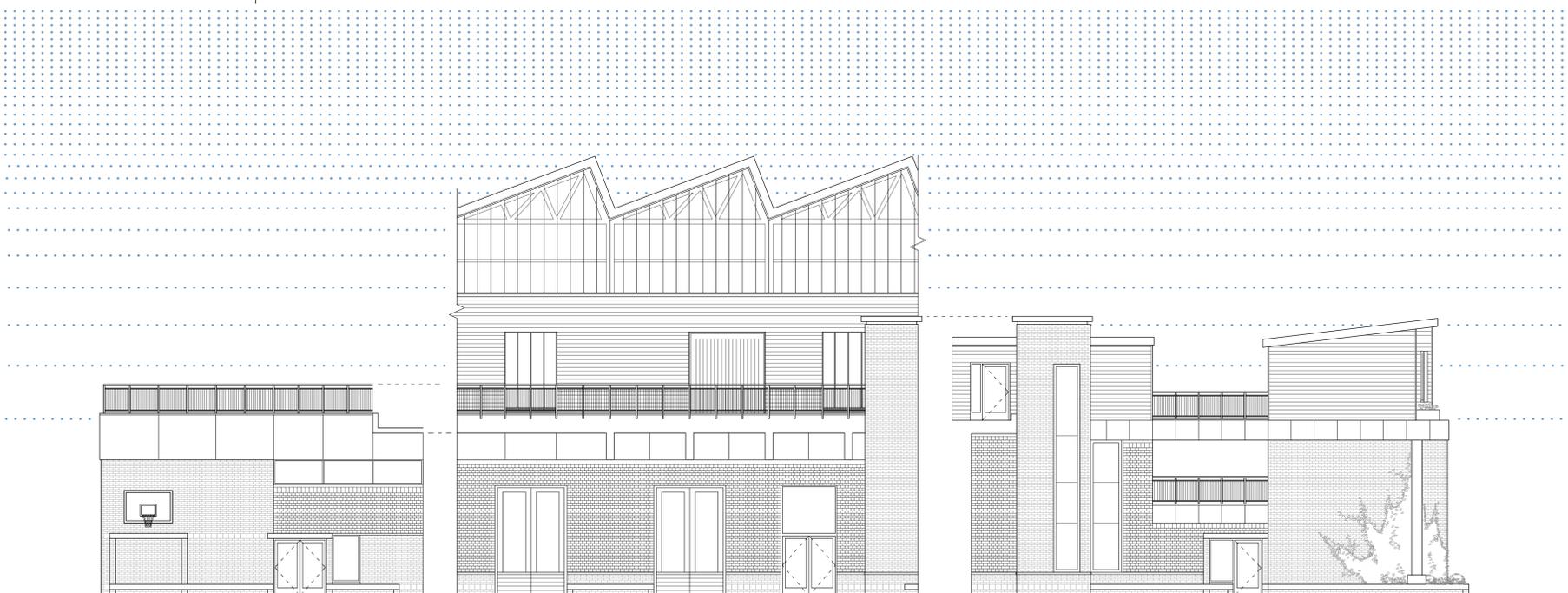
Active corridor internal view

Baths internal view

Pool internal view



Elevations that look onto central square

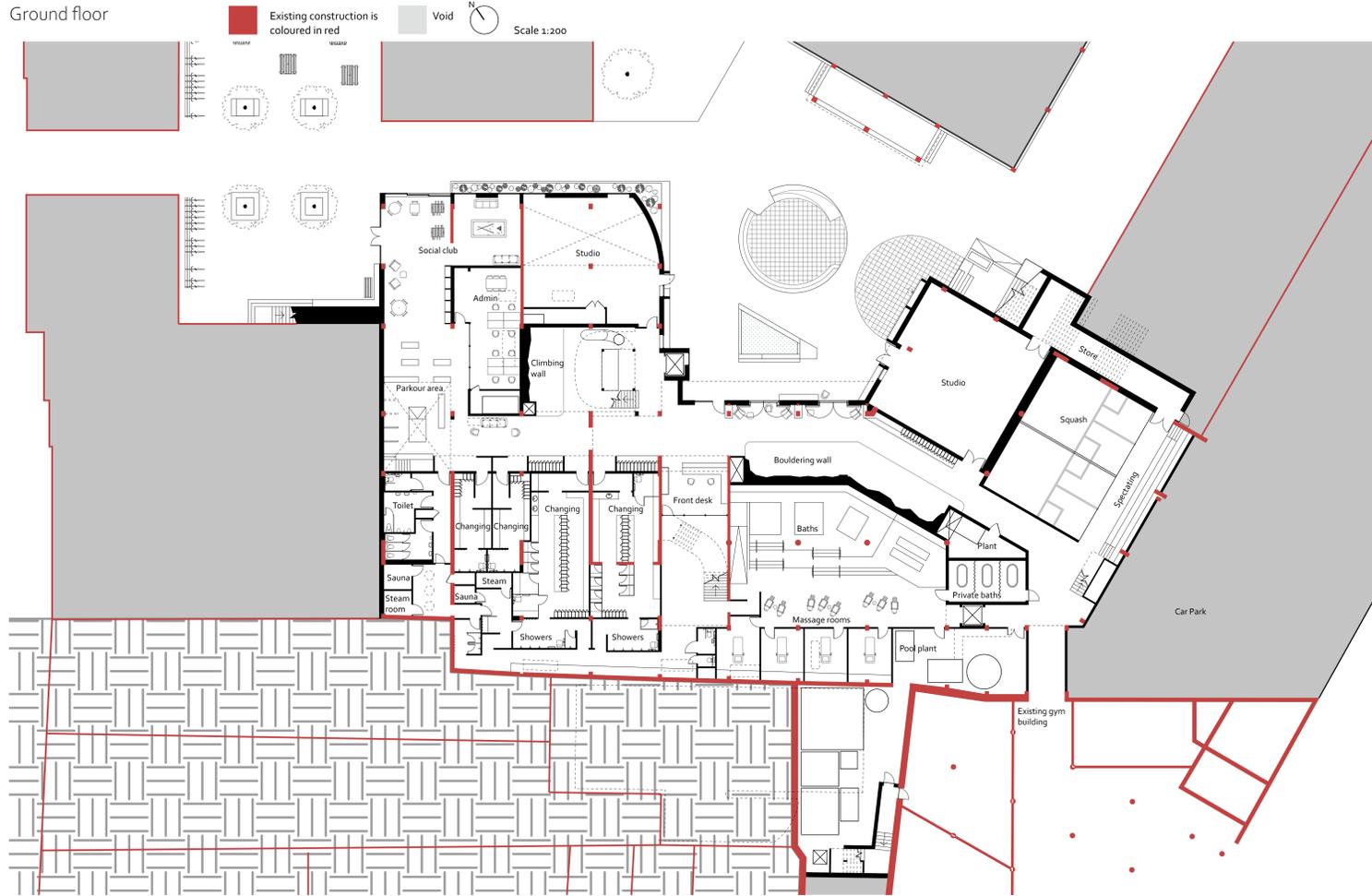


Central square external view

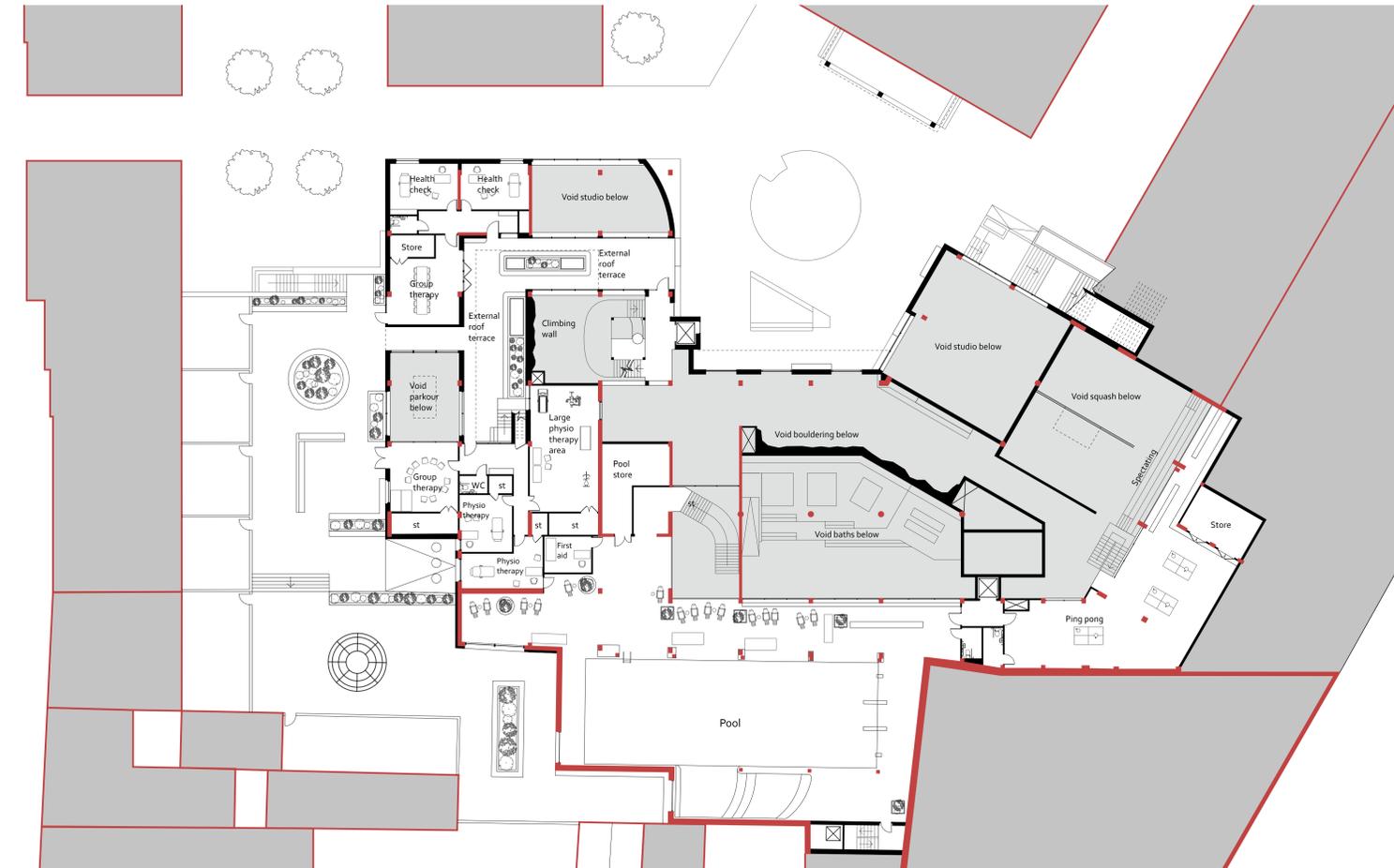
View from the roof



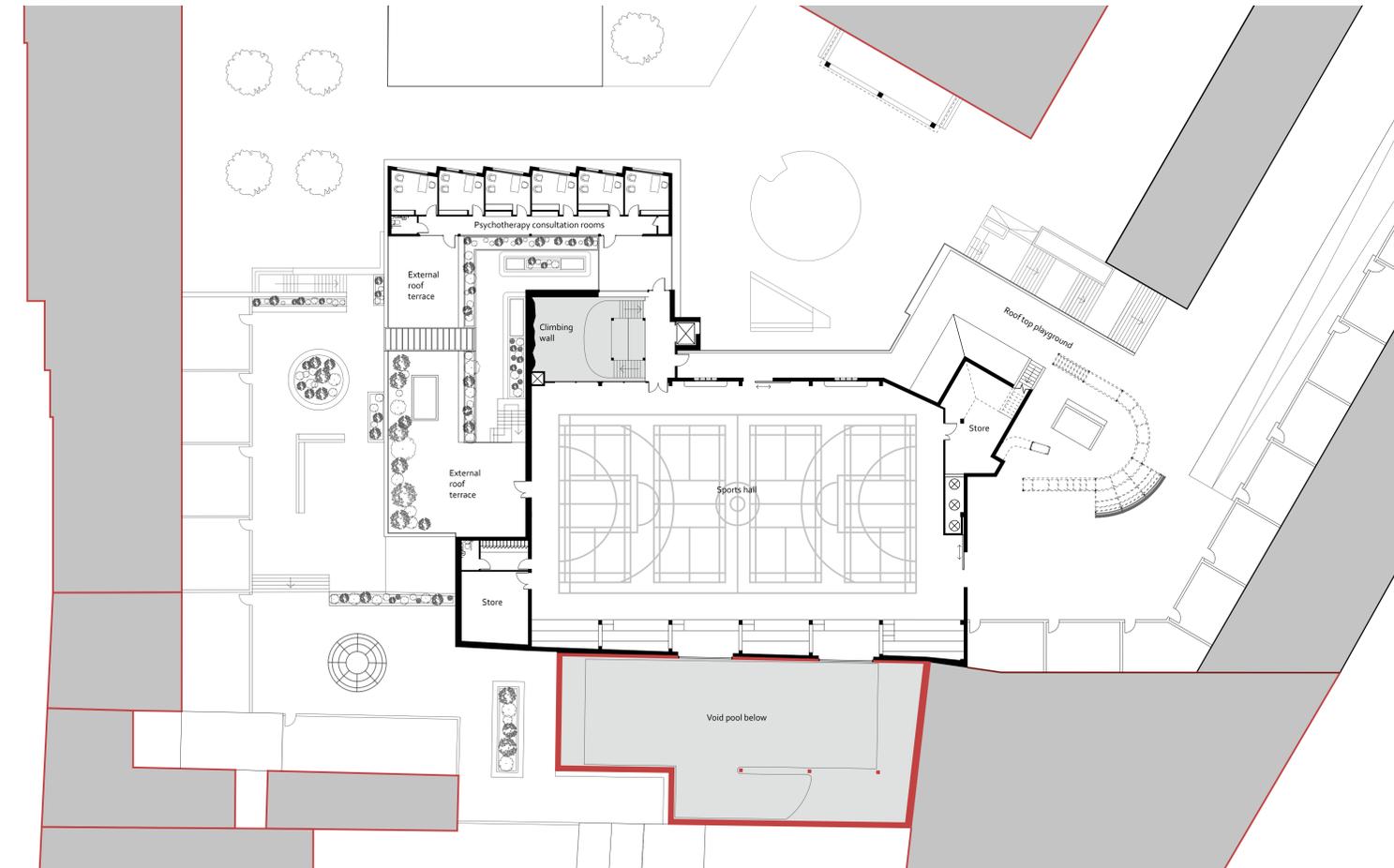
Ground floor



First floor



Second floor

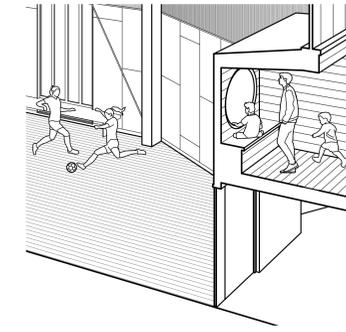


Responding to urban play in Nijmegen

Niches



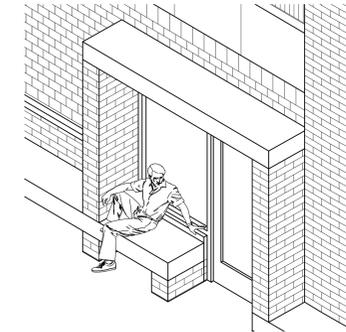
From City of Play by Dargan, A., & Zeitlin, S. J.



Doorways and thresholds - 1



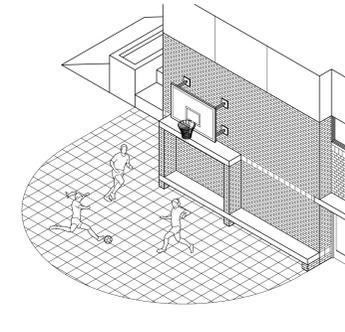
From Ludic City by Stevens, Q.



Walls and boundaries - 2



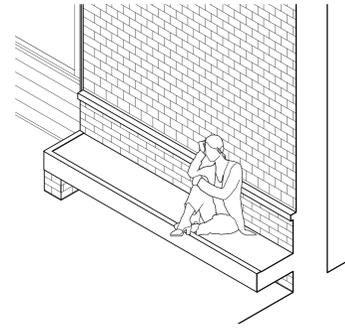
From Nigel Henderson's photographs of London's East End, by Henderson



The edge effect and sitting - 3



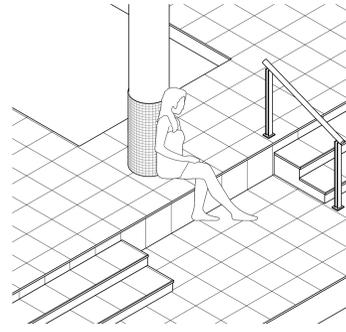
From Life Between buildings, by Jan Gehl



Bollards and columns - 4



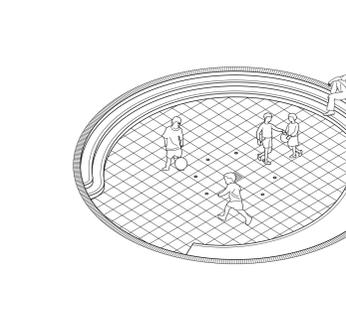
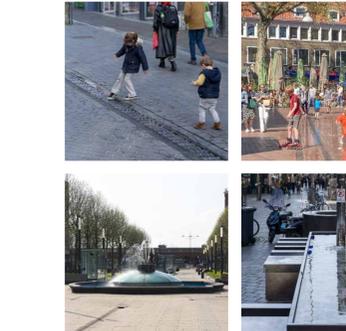
From Life Between buildings, by Jan Gehl



Water - 5



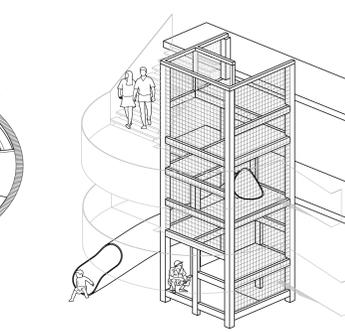
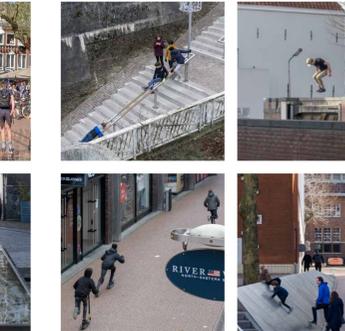
Left from Orphanage Amsterdam: building and playgrounds by Grafe, C., et al
Right from City of Play by Dargan, A., & Zeitlin, S. J.



Circulation and levels - 6



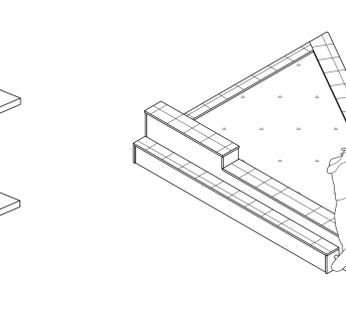
Left from Constant. New Babylon. To Us Liberty, by Nieuwenhuis, C., et al
Right from Kunstmuseum, Den Haag.



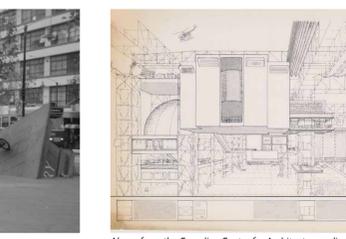
Props - 7



Left from Isamu Noguchi, by Hunter, S.
Right from Ludic City by Stevens, Q.



Blurring inside and outside - 8



Above from the Canadian Centre for Architecture online archive
Below left from Orphanage Amsterdam: building and playgrounds by Grafe, C.
Below right from the Canadian Centre for Architecture online archive

