
N^o 7

Design Precedents

7.1 Introduction

The design precedents discussed in this chapter illustrate how a variety of hybrid approaches to architecture have been implemented to create new programme-rich social, cultural and green infrastructure. Although each design precedent project has rendered its own distinct spatial qualities, unique architectural expression, dealt with vastly different programmatic requirements, differs in scale and responded to different contextual challenges, all four projects have embraced the idea that architectural space and territory extends beyond the conventional building typology.

In most instances, the “hybridity” of the projects have evolved from the specific combinations of complexities regarding programmatic, contextual, social, cultural and ecological objectives. In order to meet these objectives new connections, boundaries and relationships between urban environments, buildings, internal spaces and the landscape/seascape had to be explored, and key factors such as pedestrian movement and spatial flexibility had to remain a priority.

The projects are more than buildings and more than constructed landscapes – they are spatial organisation structures, devices for urban connection that facilitate a variety of programmes and activities in addition to their primary programmes, and as such these projects are spatial infrastructures.



Figure 7.1 ~ Design precedents.jpg

[a] Olympic sculpture Park
Source: Weiss Manfredi
[b]Oslo Operahouse
Source: Snohetta

[c]Yokohama Ferry Port
Source: Satoru Mishima/FOA
[d]ESHA Woman's University
Source: André Morin / DPA

7.1 Olympic Sculpture Park

Project: Seattle art Museum; Olympic Sculpture Park

Architect: Weiss/Manfredi

Location: Seattle, Washington, United States of America

Programme: Exhibition pavilion, pedestrian route and ecological landscape

Client: Seattle Art Museum

Year: 2007

The Olympic Sculpture Park is located on a segregated industrial brownfield site, which is split into three portions by active railroad tracks and a main arterial road on one of Seattle's last undeveloped properties at the waterfront. The precedent serves as an urban model illustrating how a hybrid architecture can address contextual issues, create new public space and spatial connections in an area/landscape that has lost significance (Huber, 2008:6). Although the scale of the project may vary to that of Berea Park,

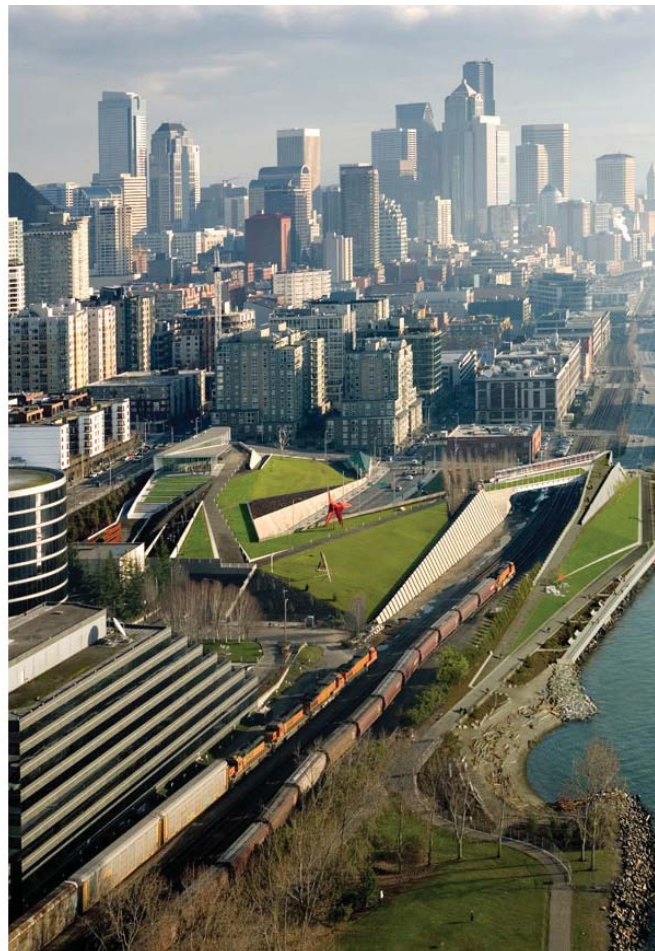


Figure 7.2 ~ Before and after.jpg

Source: Weiss Manfredi

the scenario and challenges that deal with social and ecological agenda's in urban space faced at the Olympic Sculpture Park site are largely similar to that of the Berea Park site. The foremost theoretical approaches that informed the design of the sculpture park project is routed in hybrid reciprocity (Weis et al., 2015:15) and is also in accord with the theoretical premise of the dissertation and the outlined problematic and intentions.

The "park building" aspired to solve issues of urban fragmentation created by Seattle's industrial legacy and existing mono-functional infrastructures. It illustrates how new spatial connections are made possible through the merger of dualisms between building, landscape, culture, nature, art and infrastructure (Huber, 2008:8; Weis et al., 2015:20).

The art gallery and its associated programmes are housed at the top of a sloping site and form the departure point from which the programme and activities flow towards the waterfront. The project solved difficult contextual challenges and limited accessibility, linking the city to its waterfront. This was done via a constructed and continuous pedestrian park and infrastructure that descends from the art gallery and bridges existing infrastructural barriers to permit free movement between the city and the waterfront (Huber, 2008:7).

The pavilion reads as a continuation of the sculptured landscape park with terraced spaces spilling into outdoor circulation and exhibition routes. The internal programme, art exhibition and performance are extended and continued into the landscape, while visual connections between interior and exterior spaces (made possible by the glazed

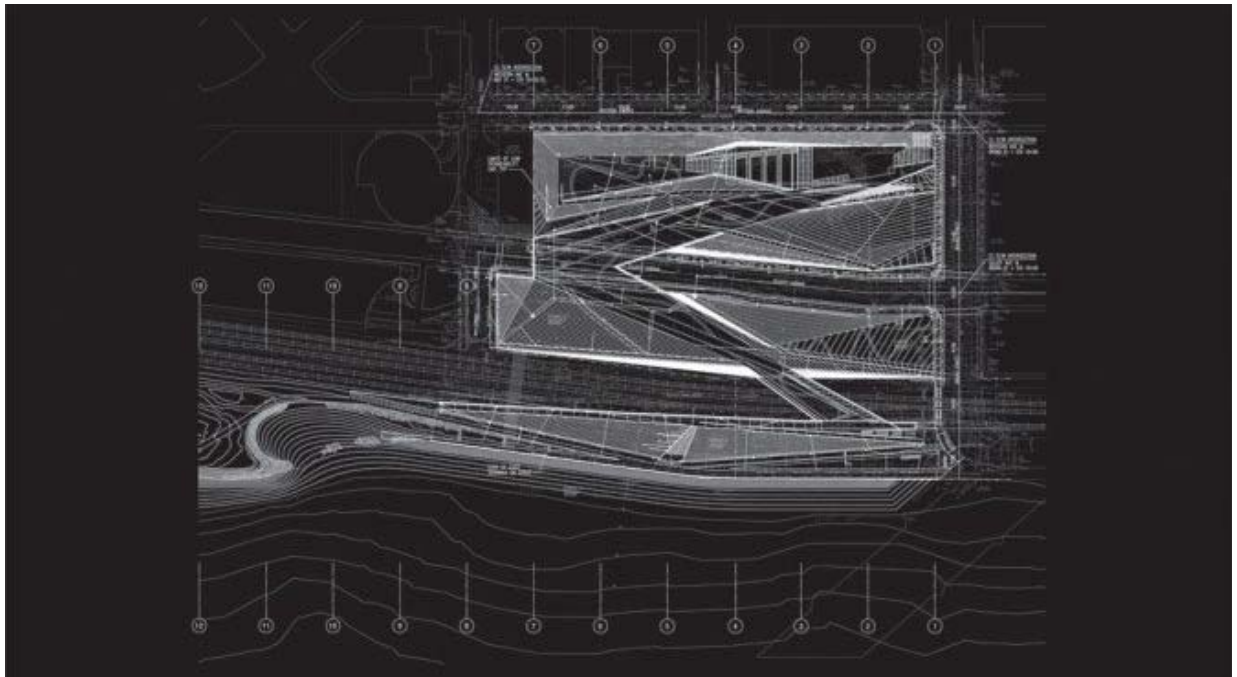


Figure 7.3 ~ Site and floor plan.jpg

The building is an extension of the park and vice versa. Source: Weiss Manfredi

facades), also bring the park into the internal exhibition spaces, which in turn reiterates the reciprocal relationship between landscape and building. This further allowed the programme to adopt a “nature” that becomes more public and makes the art and private activities more accessible (Weis et al., 2015:21). The importance of cultural dialogue through art, installations and exhibits to convey and raise awareness regarding the environment and environmental issues, is credited to have been an underlying principle of the Sculpture Park and Museum architecture (Huber, 2008:11).

The project “reclaims” the landscape, as a degraded and derelict site that is transformed to become part of the urban landscape and urban life with activities connecting to a previously neglected waterfront that is now revitalised and activated (Huber, 2008:8).

The topography was used as a metaphor in the fusion of the constructed landscape, open spaces, bridge and building and although the park is a constructed, thus artificial and sculpted landscape, it provides a naturalistic environment with ecological value (Huber, 2008:8-9). It collects and directs storm water that is slowly released into Eliot Bay and incorporates a series of tidal terraces and a shoreline garden to restore habitat for saltwater vegetation and salmon restoring ecosystems (Weis et al., 2015:58; Minner, 2011).

Considered to be a highly successful urban intervention, the Olympic Sculpture Park is an intertwining of culture and nature, which created an urban setting that allows for social interaction, space for encounters with “nature” and improves urban biodiversity (Weis et al., 2015:58; Huber, 2008:11).



Figure 7.4 ~ The gallery pavillion.jpg
The gallery pavillion. Source: Weiss Manfredi

7.2 Norwegian Opera House

Project: Norwegian (Oslo) Opera House

Architect: Snøhetta

Location: Bjørvika, Oslo, Norway

Programme: Theatre and ballet (cultural centre)

Client: Statsbygg: Norwegian Ministry of Church and Cultural Affairs

Year: 2007



Figure 7.5 ~ Gritty waterfront site.jpg

Norwegian Opera House developed at a gritty waterfront site. Source: Statsbygg

European cities tend to develop cultural flagship projects as catalysts for urban renewal and development and as such these projects are also often criticised for focusing on tourism, which may lead to gentrification (Smith & Von Krogh Strand, 2011:93, 97). In the case of the Norwegian Opera House the enhancement of the city's image and stimulation of development may also have been a major motivator and project objective, since it was developed in a prime, but gritty waterside borough known for its prostitution and drug abuse, thus creating a cultural legacy to enhance the city's image and stimulate development (Smith et al., 2011:93). Never the less, the building, with its three theatres and variety of rehearsal and workshop spaces, has become a cultural landmark that attracts tourists, and stimulates growth in the area. Its success has also initiated the prospect of other cultural facilities and

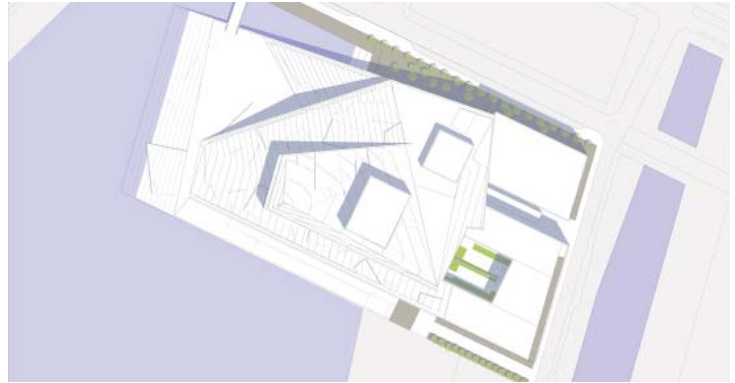


Figure 7.6 ~ Plan diagramme.jpg

Roof plan diagram. Source: Snohetta

a library to follow in the area. According to stakeholders this was, however, not a prerequisite; instead the emphasis was placed on the contribution the building could make to public life and the development of a collective identity (Smith et al., 2011:107).

For the purpose of this dissertation, the Norwegian Opera House is specifically of significance due to its design and architectural intentions. The design purposely set out to create public space and a new interface at an abandoned waterfront that at the time was polluted, undervalued and unutilised. The architecture and building itself became the new connection and facilitator between the people and the city's marine environment, as well as a new threshold space between the city, its culture and the fjord (Beatly, 2011:58).

Inclusivity was a major component in the building's concept and consequently

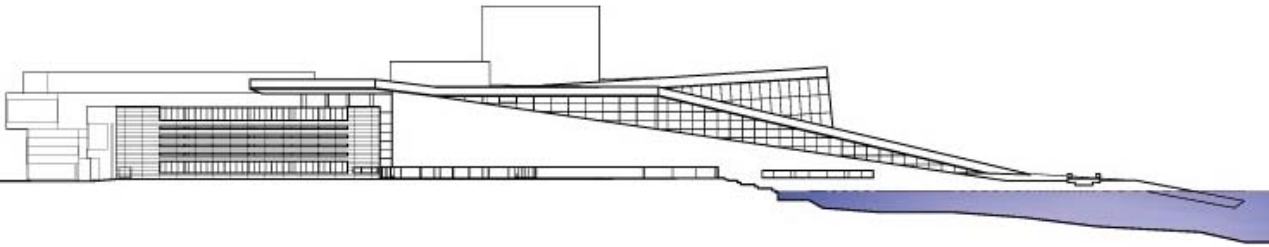


Figure 7.8 ~ North elevation.jpg
Source: Snohetta

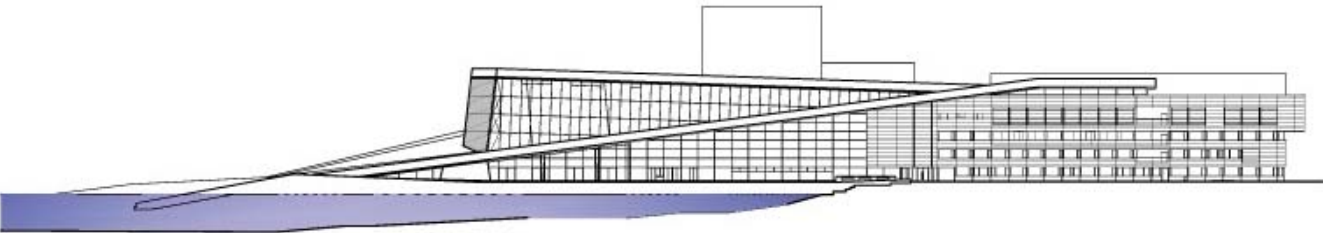


Figure 7.7 ~ South elevation.jpg
Source: Snohetta

the building's accessible, sloping and articulated roof was developed from this notion. The roof-landscape relates to the cityscape and is described by the architect to be "as much of a landscape as it is architecture" (Snohetta [sa]). In this case, an extensive series of technical programmes and spatial requirements are contained below an elegant and distinct roofscape that provide views across the fjord, the city and into the building.

Views into the production workshop spaces, rehearsal rooms and restaurants expose the day to day functioning of the building to the observer on the street. This presents the building as a part of the urban environment and it's every day events (Farren, 2009:28). The building's formal aesthetics features comfortably against the backdrop of the city, and gradually ascending marble ramps connect the roof to the fjord. It blends in with the surrounding waterscape and landscape. During winter the building resembles the floating glaciers in the water and the snowy surrounds, with

snowdrifts altering the form of the building.

The connection between the city and the sea also has symbolic value as it signifies Norway's historical connection with land and sea (Smith et al., 2011:101). The project plays a multifaceted role in promoting good urban design and public space creation, while exposing and enticing the city's inhabitants to engage with the experiences related to both culture (theatre and the ballet) and "nature" (the fjord) (Smith et al., 2011:107).

The Norwegian opera house illustrates the potential and ability of architecture to create an interface and become a threshold between urban and natural environments, celebrating the memory of historic values. The articulation of the roof, as a landscape condition, creates a secondary ground plane, which becomes the link between earth and sky and functions as a public amenity.



Figure 7.9 ~ Opera house.jpg

The Norwegian Opera House has become a vibrant public space at the water edge. Source: Jivi Havran



Figure 7.10 ~ City - water interface.jpg

Architecture as the interface between the city and water. Source: Maria Sanchez Ontin. <http://mariasanchezontin.blogspot.co.za/>



Figure 7.11 ~ Public infrastructure.jpg

Source: Jivi Havran

7.4 Yokohama Ferry Port Terminal

Project: Yokohama International Passenger Terminal
Architect: Foreign Office Architects - Farshid Moussavi, Alejandro Zaera-Polo
Location: Osanbashi Pier, Yokohama, Tokyo, Japan
Programme: International passenger terminal
Client: City of Yokohama and the Yokohama Port and Harbour Bureau
Year: 2002

Japan, despite being an island nation, tends to avoid utilising the benefit of its shoreline and harbour spaces for development (Pollock, 2002:142-149). The design of the Yokohama Ferry Port at Yokohama Bay however created a free and open civic space at the waterfront, that completely challenged existing typologies and “ill-conceived” master plans to showcase the latent potential of the city’s overlooked waterfront spaces (Pollock, 2002:142-149).

The basis and motive of the project was of course to create a new international cruise terminal that would have to cope with the many intricacies and articulation requirements of passenger arrivals and departures, but Foreign Office Architects (FOA), a young London based practise at the time, had an atypical design concept in mind (Pollock, 2002:142-149).

FOA seamlessly blurred the boundaries between inside and outside, building and landscape, in order to create a unique civic facility and a continuous public infrastructure along the water front. The building was envisioned as a new pier that would stretch between the city, Yamashita Park and the water’s edge instead of a mere object that would contrast the pier and surrounding waterfront. The integrated building was produced using landscape techniques, such as surface and topography manipulation at the scale of the building in order to produce a building expressed as a landscape condition (Allan, 2011:22). The main programme is concealed below the flowing and folding roof skin that is designed as a public park, plaza and an

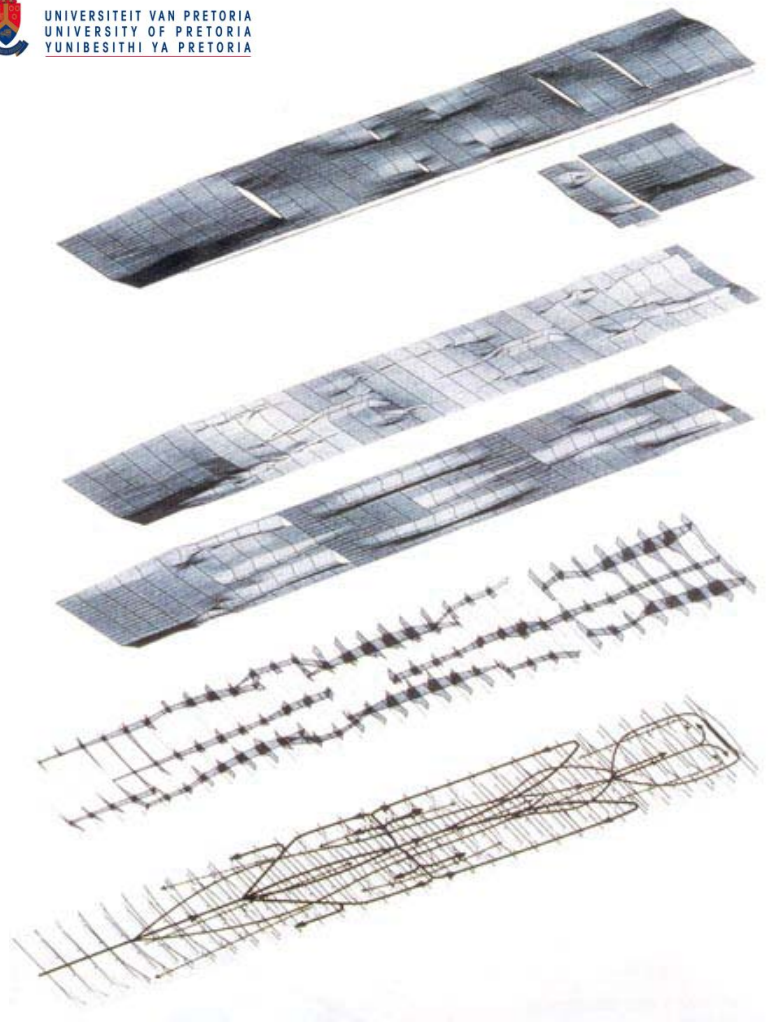
entirely newly constructed site and landscape. The reduced palette of materials that is installed and used for both internal and external applications further expresses the continuity between interior and exterior spaces.

The sculpted landscape also operates as a directional system that channels site movement and circulation (Allan, 2011:22; Pollock, 2002). Circulation diagrams, surprisingly, informed the complex geometric form, fluidity and architectural tectonic of the project and the ensuing aesthetic language resulted from functional, programmatic and structural resolution.



Figure 7.12 ~ Yokohama ferry port.jpg

The building was envisioned as a pier stretching between the city and bay. Source: <http://www.hispotion.com/yokohama-international-port-terminal-2850>



Yokohama Ferry Port. A continuous topological landscaped skin is wrapped over the internal building programme and structure to create an architecture that also becomes the site. Source: <http://cargocollective.com/yashika/Foreignb-Offie-Architects> Figure 7.13 ~ Typological landscape.jpg



Yokohama Ferry Port. Source: <http://cargocollective.com/yashika/Foreignb-Offie-Architects> Figure 7.14 ~ Ferry pier.jpg

7.5 EWHA Woman's University

Project: University, education campus building
Architect: DPA (Dominique Perrault Architecture)
Location: Shinchon, Seoul, South Korea
Programme: Educational campus with associated functions
Client: Ewha Womans University
Year: 2008

Consisting of 70 000 m² of programme, the Ewha Womans [no apostrophe] University campus hosts classrooms, common spaces, a library, workshops, computer rooms, administration offices, shops, a fitness club, theatres and cinemas within a single horizontal "landscaper" [Dominique Perrault Architecture (DPA)].

The campus building eliminates the distinction between topography and building by creating a sloping park-like structure that flows out from the ground plane to contain its vast programme. The building essentially becomes integrated into the sloping hillside it intersects (DPA). If the programme were to be configured within a vertical structure, it would have created a drastically different urban context, but instead the scale and impact of the building becomes elusive.

The building illustrates the flexible character that evolves from creating hybrid spaces. A glass-lined central valley, fundamental to the natural lighting strategy, cuts through the landform building and functions as the main circulation spine. It connects the building to its surrounding Shinchon context, but also creates a vibrant social space that doubles up as an outdoor amphitheatre and celebratory event plaza (Allan, 2011:232).

The landform building has become a green oasis that reinstates the importance of humanity's connection to the natural environment. The intensive sloping green roof structure creates a different type of public and recreational space that lends itself to experiences that are more secluded, tranquil and personal in nature. The form and concept evolved from the architect's brief to recreate the original site topography in which the building and programmes could then be introduced (DPA), and at a glance the lush vegetated roof plane does remind one of a natural hillside.

The Ewha Womans University is a dualistic architecture product, a merger and a hybrid of building and landscape. The building remains an artefact, consisting of a subterranean concrete linear mass wrapped in a continuous steel and glass skin. It contrasts its own constructed landscape, while the central valley or rift is expressed as an intervention and assertion into the landscape (DPA).

EWHA Woman's University. The building constructs a new landscape that cleverly negotiates the slope and replicate the existing topography. Source: André Morin / DPA / Adagp



Figure 7.15 ~ Constructed landscape.jpg

EWHA Woman's University. Photographs of the central "canyon" that functions as circulation spine as well as a multipurpose event plaza. Source: André Morin / DPA / Adagp



Figure 7.16 ~ Central canyon.jpg

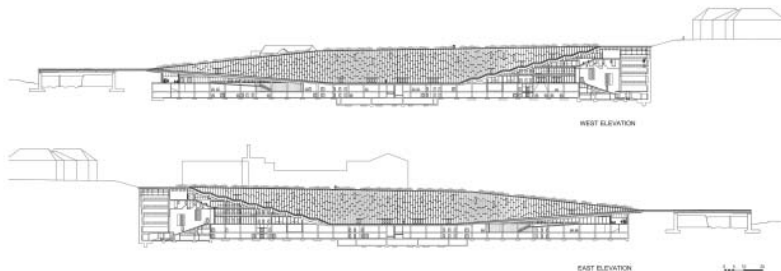


Figure 7.17 ~ Long sections.jpg

Sections. Source: DPA

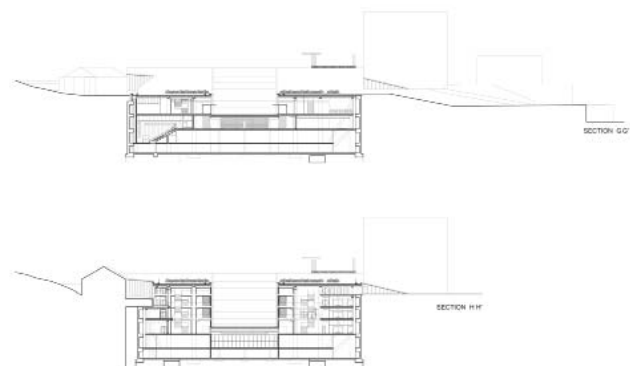


Figure 7.18 ~ Cross sections.jpg