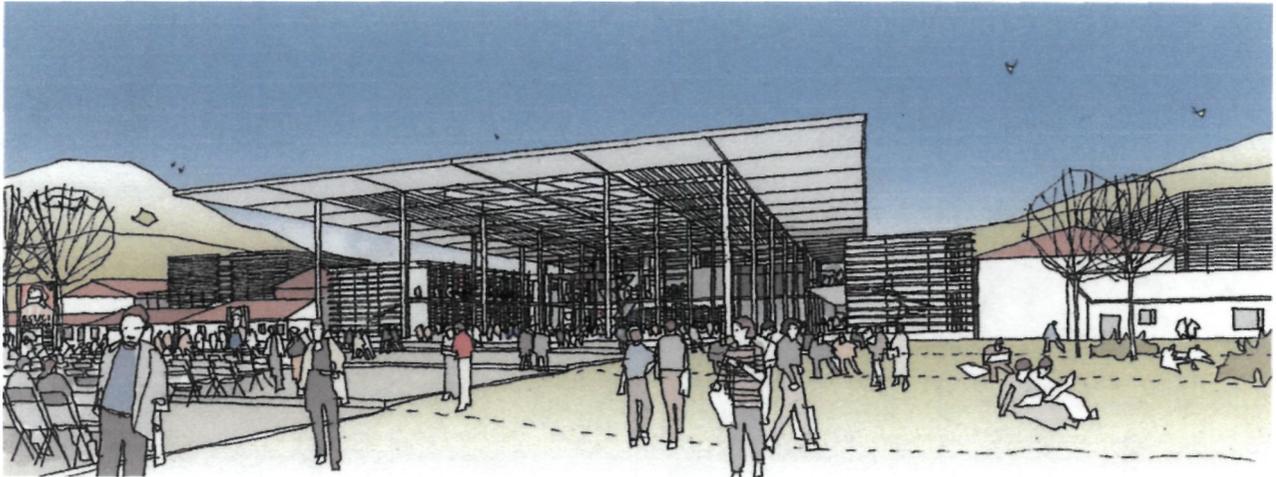




**California State University
Channel Islands**
Camarillo, California

John Spoor Broome Library



Basis of Design Report
Design & Build Documents

17.09.2004

Foster and Partners

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1. INTRODUCTION

1.1 General

Foster and Partners was invited in 1999 to become involved in the ambitious undertaking to convert the former Camarillo State Mental Hospital into the 23rd Campus of the California State University system. An extensive feasibility study period was undertaken to consider alternative strategies to transform the existing Reception and Treatment Center into a state-of-the-art Campus Library.

The brief called for a new library that will play a pivotal role in establishing the character and quality of future projects on the campus. The brief furthermore called for a signature building that would sensitively engage with the existing building fabric of the Campus.

An extended design consultation process involving the client body clearly highlighted the necessity to consider the library project in a campus wide context. The pivotal question to be addressed is the establishment of a clear and conspicuous new identity to the Campus. The Campus Commons Masterplan, based on the planning provisions set out in the global Campus Masterplan prepared by Bobrow Thomas Associates, aims to provide a planning response to this aim. The Campus Commons proposal formulated during this phase attempts to establish a new integrative idiom to the central campus program. The Library in this respect will act as a pivotal link between the Academic Core facilities to be established in the existing building stock and the new-build Residential Campus to the East. Central to this proposition furthermore is the formulation of two new focal spaces to act as the axial terminations to the Campus Commons; the Library Plaza to the East and the Science Plaza to the West. Functional linkage between the Academic Core to the East Campus will clearly be established as a publicly accessible route through the heart of the Library.

These integrative masterplan considerations would ultimately inform the unanimous decision to remove the existing Administration Building and central parts of the Treatment Center in favour of a conspicuous exposure of the library program to the Campus Commons.

These campus masterplan based considerations have since continued to inform the development of a library design that sensitively acknowledges the existing historical fabric on the one hand as well as respond to the functional requirements of a modern academic library. In this respect the library will not only stand as the academic heart but beyond that become a vibrant social focus to the campus community.

1.2 Location

The new Campus Library facility is to be located in the former Receiving and Treatment Centre building located at the eastern end of the existing Campus. In this location the Campus Library will act as the axial termination to the Commons of the Academic Campus and take pivotal position in physically linking the to be residential campus to the East of this location with the Academic Campus.

Existing Structures

The existing structures on site consist of the former State Mental Hospital Administration Building and the Receiving and Treatment Centre. The overall gross floor areas to these existing two storey buildings with partial basements amount to 31000 sf and 200000 sf respectively.

The Administration Building is a two-storey structure containing the current Campus administration offices. The basement level is substantially disused with exception of a newly installed control room to the campus fibre optics telecommunications infrastructure. The Hospital is a substantial two to three storey structure organized around a series of eight outdoor courtyards. The interiors are highly compartmentalised and will require substantial alterations to respond to the needs of a modern academic program. The exterior walls are load-bearing reinforced concrete and clay masonry facing with applied smooth stucco to achieve the deep window and door reveals characteristic to the Mission Style revival of Southern California. Following similar stylistic prescriptions roofs are consistently finished in clay barrel tiles to a shallow pitch. It is important to stress that while these structures erected in the mid 1950's do evidence the low outspread character there is a conspicuous absence of building detail quality consistently evident in the Campus Core structures established in the mid 1930's. The hospital building, in particular, is highly introverted and sectioned in its spatial disposition and consequently lacks the strong environmental "indoor-outdoor" functionalism evident in the rest of the campus architecture.

The Receiving & Treatment Center complex features highly structured and partitioned accommodation plans. Spaces serving the former medical program are arranged in linear orientation and in turn served from internal, artificially lit, central corridors. The fenestration varies in size and configuration. It consists of single glazed steel- framed windows with a highly articulated glazing bar structure. The high separation between internal and external environment is further enhanced by non-operational window lights and fixed security grilles.

1.3 Levels

The existing buildings are sited on a naturally inclined plane of the Santa Monica foothills. The fall across the site along the East to West axis amounts to approximately 22 feet towards the Campus Commons. The existing hospital building responds to the site topography in a number of stepped and isolated structural sections. The first and second floors are typically arranged over eight separate differing levels.

The design strategy aims to reconcile this disparate level condition in terms of statutory accessibility requirements as well as establishing an open and intelligible academic library program. The external works concept is similarly addressed in terms of achieving a natural and immediate physical transition between the campus commons and the library.

1.4 Access

Access to the buildings is primarily along the East - West campus axis. The development site is surrounded on all four sides by asphalted roadways. Both primary vehicular and pedestrian access is maintained from University Drive facing the Academic Campus. Parking plats are

arranged to each side of the administration building fronting the hospital. Secondary access is arranged to the rear of the hospital unit in form of an extensively asphalted service zone with attached loading bay facilities. Access to the buildings is furthermore facilitated at various points along the considerable hospital building perimeter. Much of this potential access is currently contained within clearly defined enclosed courtyards.

1.5 Landscape

The existing buildings are surrounded by mature vegetation. The buildings on the site are linked into the wider campus through the open landscape network. The natural landscape represents a unique environmental asset and provides the primary driver informing the library approach landscaping language.

1.6 Library Program

The proposed new library stands as the central element in the development of the new academic campus at Channel Islands. It serves as the intellectual and architectural centrepiece to the campus as well as establishing the character and quality of future projects.

The campus program calls for a building that "will become a dynamic crossroad for students, faculty and community members who seek to research, study and explore the vastness of knowledge that a library provides. It stands as a source of university and community pride."

In this respect the proposed design concept aims to establish a centre of learning that makes the collection and the information contained therein as accessible as possible. This aim is founded in the belief that for most, if not all of the life of the building, printed media will continue to play an important part in the delivery of scientific and technical information. The library programme accordingly calls for the entire book collection to be placed on open access stacks. Consequently computerised access to the collection is not intended to replace but compliment open shelf browsing. While there is no doubt about the benefits that printed information can make to academic research and development the principle of least effort in using library and information resources needs to be applied to the library collection design.

In this respect the focus of the design is firmly placed on the message that library resources are an important community resource and the main purpose of the project is not to merely invite, but to actually inspire use. Beyond the mere physical implications of accessing the library services stands the belief that a well-designed library building has to conspicuously expose this function to the campus.

The overriding aim of opening out the library program out to the campus stands in dialectic opposition to the introverted "sectioned" nature of the hospital building. The Treatment Centre, furthermore, is currently physically cut off from the Academic Core and Campus Commons by the former Administration Building.

The feasibility stage consultation process, during which varying degrees of selective surgical demolition were considered, was concluded with the inevitable understanding to clear the administration building and open a large central section of the hospital building out to the

campus. This would clear the ground to establish a grand ceremonial space to serve as a termination to the Campus Commons. This new space would establish a new representative social focus to the campus, suitable to casual social interaction as well as a venue for formal academic events.

The selective removal of the central hospital wing will afford the spatial consolidation of currently four isolated courtyards into one single representative and intelligible focus to the library program. This central Plaza space will be partially enclosed and house the bulk of the open access collection as well as a grand central reading room. These core library functions are supported by the "services triangle" accommodation as well as a host of social facilities located in the entrance block.

The central significance of these core library functions is further enhanced by a detached lightweight roof canopy projecting out over the Library Plaza. This covered outdoor space is physically framed all-round by a linear two-storey reinforced concrete book-stack structure. The image of the library is thus directly defined by the book collection itself.

It is intended that the building will not only become the academic focal point of the campus but also its social heart. The library entrance condition, with its generous open aspect towards the Library Plaza, is further enhanced by a coffee-bar area immediately adjacent to it. The Café serves out onto the Plaza and is intended to promote high levels of social interaction. The building entrance is clearly articulated as a full building height open space affording immediate and intelligible understanding of the central library programme. The entrance lobby includes the circulation and information desk zones as well as a general circulation area served by an open architectural feature stair and exposed elevator core serving all library levels. This open vertical circulation affords an enhanced level of social animation to the library entrance lobby. The lobby circulation core furthermore directly serves the conference- and exhibition accommodation at second floor level as well as an open-air study terrace at third floor level. Noise generated from general- as well conference room specific traffic will effectively be contained within the entrance lobby space. Full height glazing provides an effective environmental buffer between the dynamic life of the entrance block and the introspective nature of the central reading room.

1.7 Interior Planning

The conceptual layout of the building is articulated into three distinct "onion-layered" accommodation zones.

The first and innermost zone contains the central library services contained in the entrance block and the central reading room. This zone acts conceptually as a direct spatial extension to the Library Plaza. This 30 ft high space is surrounded on three sides by two tiers of open access collection stacks. It contains the reference- and periodicals collections as well as a pivotally placed staff desk zone in direct axial progression from the library entrance lobby. Abundant reference positions with fixed computer stations are arranged along continuous linear reading- and study benches. This zone furthermore includes the specialised map- and government document collections. Access to a high level of controlled day-light is achieved through fully surrounding clearstorey glazing. Extensive light access through the northlight roof-canopy glazing is conditioned through a suspended translucent acrylic rod soffit.

The second accommodation zone is defined by the open access book-stacks. The collection is systematically organised into a two-storey reinforced concrete structure affording immediate access from the reading room at first floor level and from open access galleries surrounding the reading room void at second floor level. The book-stack and access gallery framing system is conceived as an exposed, architectural quality, fair-faced concrete structure. Linear browsing benches and workstations frame this core library asset. The continuous linear desk layout facing the reading room at second floor incorporates power and data connectivity. This functional layer of the library further incorporates services cores located centrally adjacent to the primary circulation path of the library. Restrooms, photocopy stations and installation risers are located in this zone.

The third accommodation zone is defined by the existing building wings surrounding the new-build library core and book collection zones. The two-storey accommodation space has been zoned in accordance with library program specific access requirements as well as environmental considerations. Functions requiring high levels of compartmentation and environmental containment are located at first floor level. Instructional- and Computer Labs fall in this zoning category. The second floor, featuring enhanced floor to ceiling heights and more immediate access to natural light, is primarily zoned into open plan study space. Study space is organised into distinct area blocks of open study table and carrels. Free standing fully enclosed single- and group study modules will be positioned at regular intervals to provide enhanced accessibility and spatial definition to the open study floor.

The "onion-skin" layering of the functional program of the library into distinct new- build and existing building zones is clearly articulated. The interface between the "old and new" building is reinforced by a two-storey, naturally lit, buffer zone. Circulation between these two distinctly different environments is effected through lightweight bridge-links positioned at strategic intervals along the full length of the retained courtyard elevations. This spatial and programmatic interaction between existing and new accommodation space is reinforced further by physically characterizing the overall library space conceptually as a "one-room" library program. All existing window frames will be removed and selectively enlarged to enhance a greater level of spatial connectivity across the overall library program. Deep window alcoves of laminated timber provide informal settings for introverted study or social interaction. Continuous horizontal roof-level glazing further reinforces the spatial articulation between old and new building zones. Generous daylight is admitted onto the book-stacks, circulation zones and into the study areas of the existing building wings.

This feature in combination with the overall removal of all existing steel window frames will provide the opportunity to establish an appropriate contemporary language to this important building zone. The prime motivation underlying the effort to establish a new identity to the former hospital building is however to establish a sensitive and balanced dialogue between the historical and contemporary architectural idiom throughout the overall spatial program. The spatial role of the buffer zone to read as a functional as well as programmatic threshold will be further emphasised by architectural effect lighting. The existing elevations will be wall-wash lit from the base to establish a dramatic night-time backdrop to the book stack wall. This will spatially frame the central reading room volume and Library Plaza. The existing building fabric is thereby given due functional and aesthetic recognition as a device facilitating intelligible orientation and navigation through the library accommodation program.

The library accommodation program assigned to the retained rear section of the building takes advantage of its immediate adjacency to the service area facing the east campus. Both library administration as well as technical services departments, essential to the functional running of the library, are strategically located to the centre-rear of the building immediately adjacent to the existing loading dock area. Controlled dedicated staff- and service access is maintained at first floor level.

The second floor level incorporates study related program blocks adjacent to the public, elevated, East Campus facing library entrance. A pedestrian access bridge capitalises on the natural level change from the residential town centre plateau to the library. This public route establishes the library as the integrative link between the academic campus to the West and the residential campus, with its social facilities, to the East. Access control will be maintained through the staff position attached to the media library. Both the media library and the technical centre program blocks are located on this level to take full advantage of the open, generous height, space.

1.9 Circulation

Access to the library program is maintained as an intuitive, intelligible, approach relying to a minimum on formal signage elements. It follows as a natural linear extension to the campus commons circulation linking the academic core to the West and the residential campus to the East of the library. The campus approach and plaza act as a monumental threshold to the library itself. The library plaza, with its light-weight canopy cover, will constitute the formal "signage-board" of the library. Double storey curtain-wall glazing opens direct views into the book-stack wings framing the plaza to each side. The entrance block massing and structure signifies the library entrance, and associated social services, without confusion. Extensive frontage glazing to this building block affords transparent views into the depth of the reading room beyond. Gradual, controlled, shifts in the natural light envelope reinforce the processional nature of the approach experience.

The internal circulation system represents the structuring device to the "onion layer" disposition of the library programme. A network of concentric rings around the library core functions, the central service block and reading room, facilitates logical access to all library spaces. The disposition of circulation elements is intended to facilitate immediate interaction with the library program, social life and external environment. Vertical circulation elements are centrally located immediately adjacent to the respective entrances to the building. In order to avoid potential noise disturbance to the reading room and study spaces beyond vertical traffic has been contained within the glazed enclosure of the triple height entrance lobby. Socially oriented functions as the circulation area, conference room, exhibition area and café are contained and accessed within this area. The dynamic movement associated with the building entrance and social services enriches the library core area without undue environmental prejudice.

1.10 Structural and Material Language

The spatial response to the new library springs as a natural response to the physical structure of the surrounding campus. The low-rise, open space, nature of the site is brought deep into the confines of the former Reception and Treatment Centre. The building structure and massing of the design solution establishes a dialogue between the requirement for a transparent, contemporary, learning environment on the one hand and the introverted nature of the existing former health facilities on the other. An extensive process of "peeling-back" the existing fit-out layers to the structural concrete shell, accompanied by the removal of barring window elements, will reveal accommodation space that is responsive to the "one-room" interactive disposition of the library. The Library is all about transparency.

The structural language applied to the new-build library core underlines these principles. The principle of an open and transparent learning environment is given physical manifestation by an efficient and lucid framing language. The reinforced concrete building frame is executed in its inherent honesty as fair-faced "architectural" concrete. Economy of design and material characterises the resulting space. The structural language is to stand without decorative coats or cladding elements; relying instead on their intrinsic "self-finishing" characteristics. The exposed material nature of the structure requires a focused attention on the quality of design and execution of constructive details. Honest articulation of material joints and interfaces establishes the inherent architectural language of the project. It is the integrity of the building's construction and the need to provide interest and articulation in the structure at all levels that provides the essential quality of the building. The honesty and immediacy in the use of its principal materials determines its tactile quality. It is the details which control the reaction of the public and hence their perception of the scale and warmth of the building.

The envelope to the concrete framed building is effected as a transparent lattice of structural steel. The building envelope is defined by the roof canopy and extensive curtain-wall glazing enclosing the building. Primary structural sections are clearly expressed to communicate the inherent load-bearing function of the framing solution. Structural joint details linking circular hollow steel columns with primary beams, as well as exposed bracing elements, are elegantly engineered to articulate this primary function. With the purpose of reinforcing the primary structural language of the building secondary support elements, conversely, are embedded into the structural depth of the structural frame and concealed with metal cladding elements.

Extensive glazing throughout the building elevations is essential in admitting ample natural daylight to all working spaces. It furthermore enhances the conceptually vital integration of the library with the rest of the campus. In order to reduce visual obstruction curtain wall frontages are consistently framed up with large span cladding sections responding to the structural module of the building frame.

2.1 Value Engineering Proposals

The sketch-drawing series SK(VE)-001 to 033 attached in continuation outline significant building design positions considered for value engineering. They represent a design scope addendum to the building design anchored in the construction documents. These proposals illustrate a quantified value management path of streamlining a number of complex, costly, features in keeping with the principal tenets of the project design. The drawings attached in continuation outline the scope of design changes to the building element in question as well as the constructive details proposed in order to maintain a consistent architectural language with the established building design. The areas considered are as follows:

- Archival Storage Basement
- Library Plaza
- Entrance Block
- Book-stack Gallery
- Bufferzone
- Reading Room North-light System

2.1.1 Archival Storage Basement and Library Plaza

The initial library program made provisions for a considerable archival collection component clearly evident in the completed construction documents. This program block centres around the archival storage and reading room located at basement level in the entrance block section of the building. Archive related administration spaces, conservation labs and display areas, as the Lagomarsino Room, are located in immediate adjacency. The parallel opportunity to establish a large storage basement in the new build project was readily welcomed as a sound investment by the campus authorities. This initially moth-balled area would serve well in the future to accommodate the expansion of the book collection in compact shelving. The open access collection component in a future library expansion phase will find a suitable strategic location in the yet uncovered courtyard spaces.

The partial removal of this particular basement section has a substantial impact on the plaza structure overhead. The plaza deck can now be developed as a simple concrete slab on grade as opposed to a suspended, tightly waterproofed, basement roof slab. In parallel it is proposed to reduce the extent and projection of the library plaza deck towards the campus commons. The illustrated set-back allows for a simplification in the library approach path. A simplified

sequence of axial ramps and landings facilitates direct access to the library deck level. These elements are set-out in accordance with the ADA provisions. It is important to note in this context the unchanged conceptual premise of maintaining a social dimension to the library access experience. The indicative sketch drawings illustrate in continuation the siting of linear benches, venues for social exchange, along the ramped approach path. The design of these elements intends to establish a consistent language with similar design features within the library. A simple language of robust and self-finishing materials is intended throughout.

In parallel with the changes affecting the approach sequence of the library it is proposed to set-back the building canopy by one full structural bay. It is however important to verify in this context that sun shading to the bookstack gallery wings has not been negatively affected.

Please refer to drawings SK(VE)-001 to 005 inclusive.

2.1.2 Entrance Block

The removal of the archival basement section carries with it a pronounced relaxation of the fire safety strategy of the entrance block area. Lateral exits into escape staircases serving the conference room and exhibition area on the second floor level of the entrance block are significantly no longer required by code. This establishes furthermore a relaxation with regards to the smoke ventilation strategy evident in the construction documents; smoke evacuation rooflights over the entrance lobby void are no longer required.

A significant aspect of the value engineering process however is the change in the structural framing language of this building section. The structural solution evident in the original design favours an alignment of the material language with the steelwork canopy covering the central open space of the building. A constructive language composed of structural steelwork and aluminium cladding characterised this area. Value engineering considerations suggest the homogenisation of the overall building frame into one single structural language of in-situ reinforced concrete. This renders considerable economies in engineering and construction management. The in-situ concrete language of the entrance block and bookstack galleries is envisaged as fair-faced, architectural, concrete requiring no remedial- or cosmetic linings. Finished surface- and edge quality as well as joint alignment accuracy is of the greatest importance. Space defining linings are to be integrated and clearly aligned into the structural framing language.

As before close adherence is maintained to the spatial, as well as environmental, language of the initial design. The structural and material language is set-out to enhance the reception and social function of the entrance block. Transparency of the entrance lobby to the library plaza and reading room is vital in intelligibly communicating the program of the library to patrons with a minimum of formal signage elements. Minimally framed full-height structural glazing complements the in-situ concrete structural framing of this space. Railings to stair-flights and landings, as well as circulation bridges, are intended as base-clamped glass cantilevers providing a minimum of visual interference to the entrance space.

Additive, non-structural, lining elements are restricted to sound control timber panelling set into structural wall recesses and ceilings as indicated. Environmental services as air supply and extraction points, as well as lighting elements, are subtly integrated into the suspended ceiling zones. The quality of lining materials and constructive details is vital in articulating the structural language of the building, as well as adding warmth and tactile quality to the library spaces.

Please note that the general disposition and layout of functional spaces is developed in response to the requirements set-out in the "Building and Service Program Sketch". Furniture- and space-planning elements reflected in the base design remain unaltered.

Please refer to drawings SK(VE)-006 to 023 inclusive.

2.1.3 Bookstack Gallery and Buffer Zone

The bookstack galleries signify the library to the library plaza and to the campus beyond. Central conceptual premise of the project design has been squarely placed on the powerful emblematic image of the book collection to structure a clear, inspirational and intelligible working environment. The demolition of the central hospital accommodation wing and consolidation of four central courtyards establishes a contiguous open space to the campus commons. Central premise of the campus library concept is the image of surrounding this newly created "heart" of the campus with the material representation of learning, the book collection itself. The established design envisages a surrounding wall of double-storey high bookstacks that structurally integrate with and thereby define the structural concrete frame. The bookstacks are intended to stand on independent feet and rise conceptually "through" the structural concrete floor diaphragm towards anchoring points in the bookstack gallery roof-slab. The floor-slab at second floor level provides access and lateral support to the collection. It is the material volume of the book collection, as the principal asset of the library, that defines the space in a continuous linear and double storey high wall of books.

The architectural translation of this conceptual premise clearly carries an enhanced level of structural- and constructional complexity; evident in the design and construction documents. The technical translation of the wall-of-books design concept represents an exiting challenge in terms integrating, as well as articulating, services and structure. The resulting language is of the greatest value to the project.

The value-engineering driven proposal to substitute the "diaphragm-slab" with a flat-slab solution has obvious constructional- and cost benefits, but has inherent architectural short-falls that need to be addressed in the design & construct proposals.

Floor-supported book-stacks represent a more conventional and economical alternative yet lack the evocative vertical dimension over two storeys established in the original design. A 35ft deep slab solution, although clearly more economical, will have a marked visual impact on the vertical articulation of the bookstack wall. Sketch sheets SK(VE)-030A to D illustrate the spectrum of articulation to be explored for this building element. Sketch sheets SK(VE)-

030 A and B illustrate the base modification over a strictly "flat-slab" solution reflected in the Structural Addendum set. Basic premise is to structure the expanse of the slab soffit to reflect its function overhead. Deep beam zones reflect the bookstack range module above and below the slab; thereby stressing the vertical continuity of the bookstack arrangement. Depressed slab sections between deep beams reflect the lesser stressed range aisles module and facilitate the integration of suspended acoustic timber ceiling panels concealing building services components elegantly into the structure. These devices facilitate the effective visual and functional articulation of the extensive slab soffit. This strategy furthermore mirrors the structural expression set-up in the revised library entrance block; establishing a consistent material language throughout the building.

Lighting of the bookstack zone is effected with linear fluorescent luminaires installed over each bookstack range. This departure over the typical installation over the range aisles is intended to enhance the incidence angle of light onto the bookstack faces. This will carry a marked improvement in reducing the hereto typical overshadowing of book-spines through over-hanging, super-imposing, book-shelves. Please note that the lighting cone is restricted to light the bookstack faces exclusively. Access lighting of the floor is maintained through direct reflection off the bookstack faces. This installation proposal of aligning fluorescent luminaires over bookstack ranges, beyond offering a clear environmental advantage over typical solutions, enhances the design premise of vertical articulation across two floor levels. Please note that installation of luminaires can be considered as suspended from or integrated into the structural slab soffit, or supported of the bookstack framing.

Great emphasis will be placed in the review of design and construct proposals with regard to the interpretation of the conceptual design premise informing this important building element. Great attention ought to be placed in achieving an effective visual integration of environmental- and fire safety services elements, railings and book-stacks with the proposed structural framing solution. If a flat slab solution is to be adopted it is strongly recommended to consider the integration of acoustic timber ceiling panels embedded into structural slab recesses to effectively animate the otherwise exposed concrete ceiling planes. Incorporating fire safety components, range pipes and pendant sprinklers, into these recessed ceiling zones will greatly contribute to the articulated structural language of the building. Sketch sheets SK(VE)-030 B and D illustrate some avenues explored in this context; design & construct proposals may consider SK(VE)-030A/B as the base design.

Railings have been redefined as base clamped glass cantilevers in response to the more restrained structural language of the bookstack gallery floors. Please refer to sketch sheet SK(VE)-031 outlining the typical floor containment design premises. The seating bench detail to the rear face of the bookstack gallery at second floor level, intended for informal browsing, has been deleted to enhance the visual transparency of the buffer zone along the existing building wings. The depressed "moat" zone at first floor level, articulating the relation between existing and new accommodation, has been revised to enhance the social interactivity and transparency between these two building zones. A substantial cost saving over the base design is to be associated with these changes.

A continuous up-stand bench detail to the perimeter of the floor slab now mediates the interface between old and new. It provides an attractive, daylight drenched, venue for

browsing and social exchange. Linear seating is provided in the form of laminated plywood sections suspended from monolithic concrete plinth sections running between passage ramps.

Please refer to drawings SK(VE)-024 to 031 inclusive.

2.1.4 Reading Room Northlight System

Spatial transparency and orientation is accompanied hand-in-hand with generous daylight access into the building. Extensive controlled daylight is admitted into the reading room and "buffer-zone" through the surrounding clearstorey glazing at roof level. The canopy design over the reading room complements this perimetral space lighting with an extensive saw-tooth roof skylight system. Even, non-directional, light is filtered through a suspended translucent ceiling screen into the reading room space below. This acrylic rod assembly provides a light and airy "fifth elevation" to the heart of the library. This illuminated ceiling plane furthermore provides an effective screen concealing the saw-tooth skylight structure overhead. Linear fluorescent lighting is incorporated into individual rooflight bays to provide effective soffit lighting at night. This feature is essential in providing a high-level visual relief to the low-level task-lighting of the study- and reference tables at reading room floor level. The lighting concept articulates the concentric "onion-layering" of functional zones around the reading room. This principle is maintained both in the day-lighting as well as in the night-time lighting strategy. Please refer to sketch drawings SK(VE)-032 to 33 inclusive.

Design and Construct proposals will be expected to maintain the environmental- and spatial premise of the design while considering the actual structural make-up and disposition of the northlight system. Please note that smoke ventilation informing the roof light design appears no longer pertinent. Design proposals are however required to maintain, un-assisted, natural exhaust of hot air in summer.