

3.3 PLANNING THE ROCK

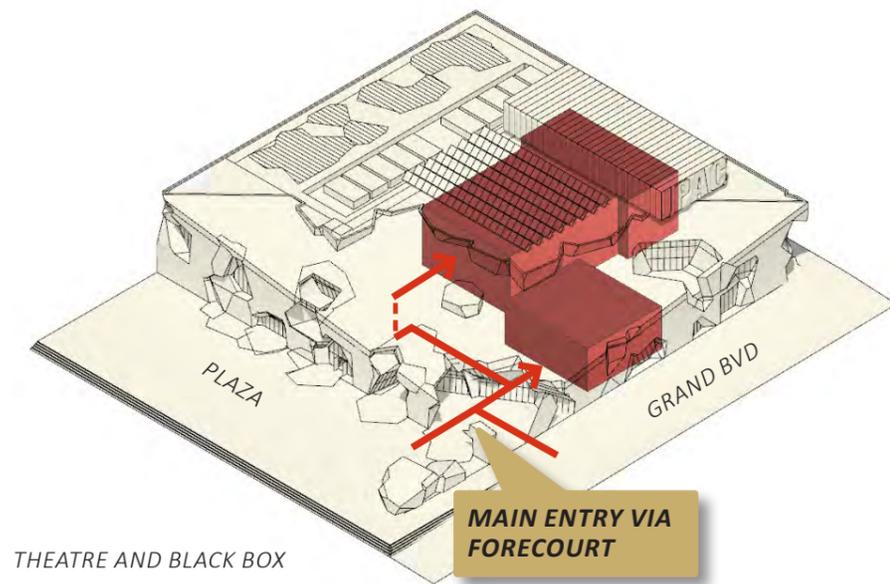
The layout of the building is structured on the procession from the parkland and the eroded façade, through the remarkable interior landscape. From the north-western corner the building works diagonally from the street intersection, through the entry forecourt, into the performance spaces, to back-of-house, loading and car parking access on the south-eastern corner.

This layout pushes all the activated areas to the front, addressing Grand Boulevard and Central Park area in equal measure. Entry points are located in all corners – black box and theatre entry to the north-west corner; the gallery and backstage entry to the south-west corner, and community access in the north-east corner. This spreads movement around the building, whilst creating dramatic entry points through the eroded rock.

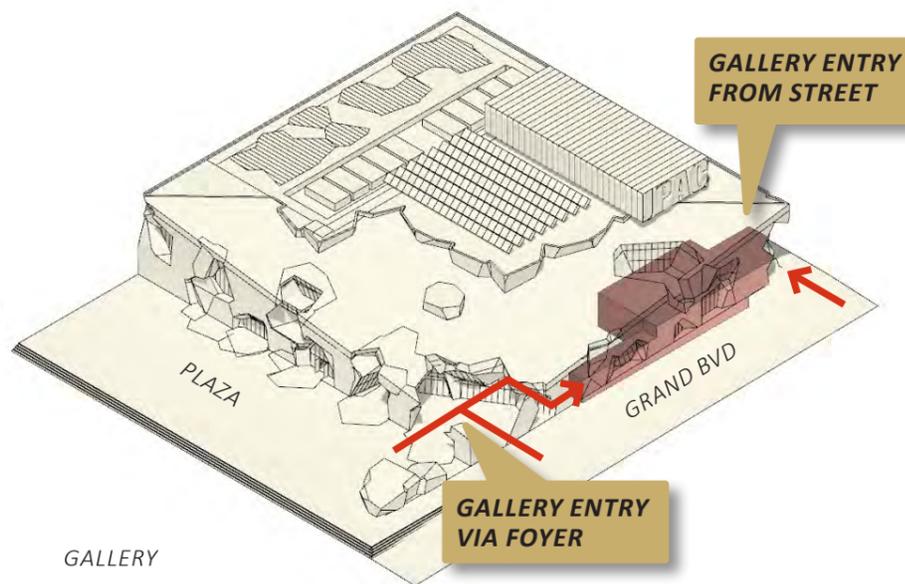
The internal planning is driven by the 'side-by-side' dimensions of car park, theatre and black box across the site. This creates a distinct split between the back-of-house (BOH), administration and loading areas to Teakle Court, and the front-of-house (FOH), café and community areas to the north. The height of the performance boxes and car park generates the falling slope of the block to the corner, creating a sense of the building emerging from the ground.

The integration of the car parking in an above ground configuration contributes to the building mass form, pushing the performing arts volume to the corner, not set back from the street. The community studios 'skin' the carpark block to the north, creating a shared lobby area with the carpark and theatre.

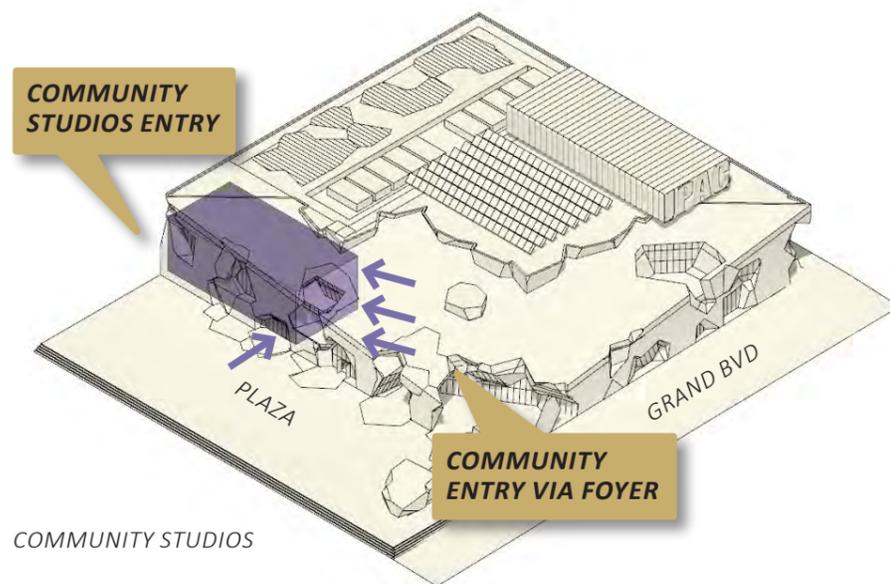
For the performer, the back-of-house is a logical and practical array of spaces that are designed to meet the primary needs of show making; proximity of loading to stage and storage, adjacency of dressing rooms and performance spaces, efficient and clear circulation, and so on.



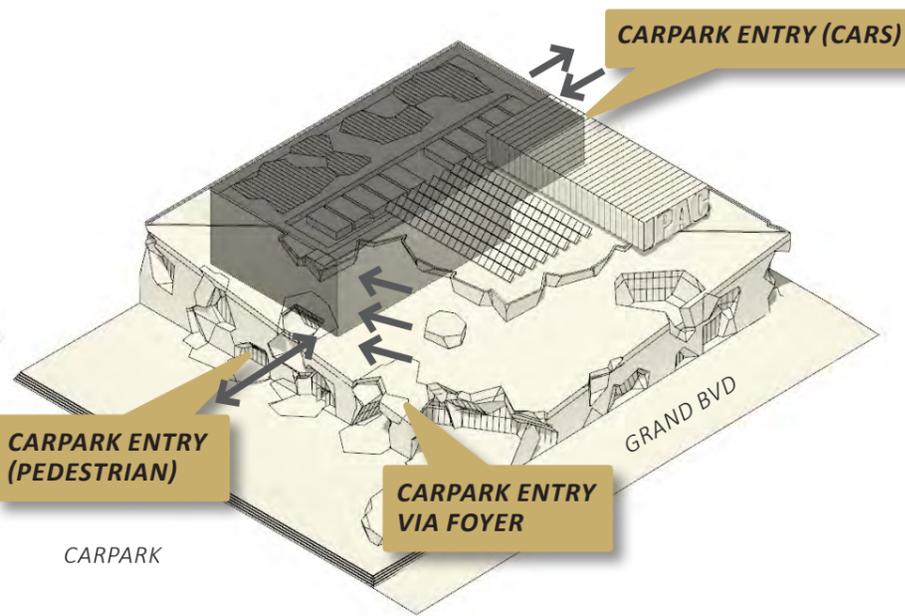
THEATRE AND BLACK BOX



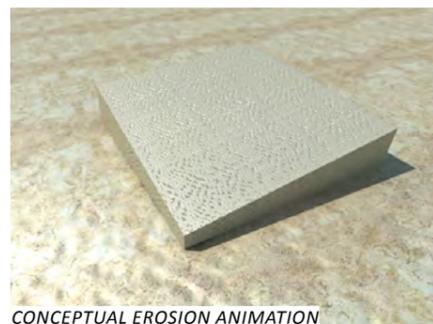
GALLERY



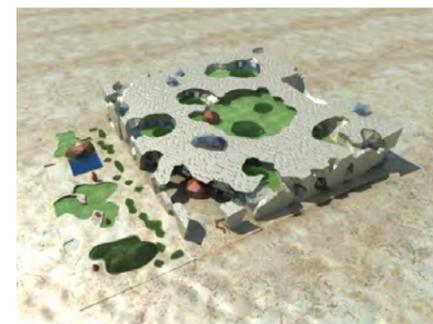
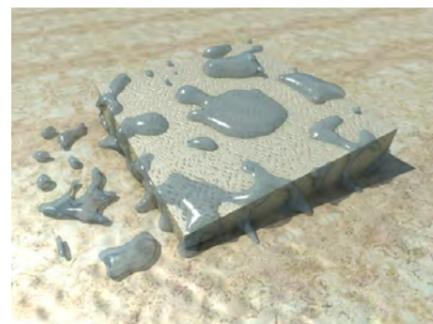
COMMUNITY STUDIOS



CARPARK



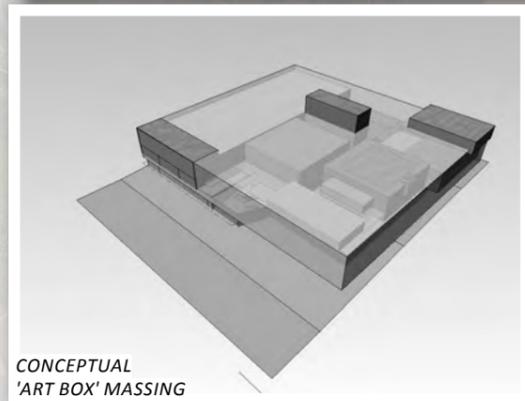
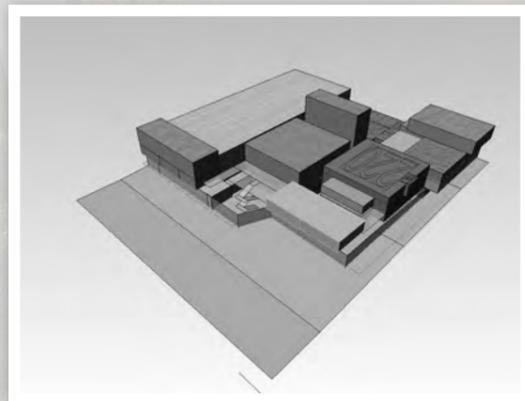
CONCEPTUAL EROSION ANIMATION



3.4 ART BOX (THREE BUILDINGS IN ONE)

The Joondalup Performing Arts and Cultural Facility is briefed to combine a diverse range of visual and performing arts facilities and pursuits, from community practise to local, national and international performance and exhibition. As such it is a number of buildings in one, a precinct within a building. The strategy for the internal planning is that of a larger conceptual block, filled with smaller objects arranged in a 'loose-fit' strategy. This design approach has allowed for flexibility, with internal configurations able to adapt with the changing brief requirements from the various committee presentations and outcomes. The final plan has gone through an iterative process of development since the competition stage.

The internal spaces comprise the primary performance spaces (the 850-seat lyric theatre and 200-seat black box studio theatre), the community facilities including visual art, music and dance studios, and conference facilities, and the art gallery and associated curatorial spaces. These facilities are linked with an efficient yet dynamic and stimulating circulation network that shares lifts, stairs and foyer spaces and includes generous audience services facilities, amenities and a 90-seat café. These spaces are supported by a back-of-house facility consummate to the ambition of premium performance and events.



CONCEPTUAL
'ART BOX' MASSING

4. JPACF ELEMENTS

4.1 ENTRY FORECOURT AND PLAZA

The entry forecourt and plaza provide a combined open area of 2,000sqm capable of comfortably accommodating over 1,000 patrons. The space is ideally located to take advantage of the northern aspect with extensive tree planting providing shade and protection for patrons to ensure that the area can be used throughout the year.

A new enclosure to the existing services building adjacent to Grand Boulevard adopts the typology of the JPACF. The new form incorporates a fully serviced stage area to its eastern face, provides signage for the JPACF to its western face, and provides a sense of enclosure to the western end of the plaza.

The adjacent entry forecourt is 600sqm in size and serves a dual function as an external exhibition space and as a theatrical entry to the JPACF. Patrons weave through a series of pinnacle forms, one of which rises up to form an overhanging canopy. These overhanging forms clearly define the building entry points. The entry forecourt also provides an invaluable socialising area for patrons with large areas of glazing allowing patrons to see into and be seen from the internal foyers. The forecourt environment is enhanced by substantive native planting, proposed to include transplanted grass trees from the existing site.

This planting is extended along the northern facade of the JPACF where it not only provides shade and shelter for patrons and passers-by, but also plays a vital role in reducing the heat load to the northern areas of the JPACF. The scale of the adjacent plaza to the immediate north is mitigated by a number of design strategies including the use of variable materials, large areas of native planting and the introduction of a water course which winds its way through the plaza from Central Park. The plaza comprises areas of hard paving and softer granitic sand, which is a robust material widely used for outdoor event spaces, and suitable for disabled access.

The plaza also provides a ceremonial pathway to Jinan Gardens. This pathway morphs from the large open spaces associated with the stage area and main JPACF entry to the west, into to a smaller intimately scaled path bordered by native planting at the entry of Jinan Gardens.

In addition to the major east-west axis of the plaza, north-south access, both visual and physical, is provided at various intervals along the northern edge of the plaza. These connections to Central Park, Jinan Gardens and beyond ensure that JPACF is fully integrated into both the immediate surrounds and into the wider community of Joondalup.





4.2 FRONT OF HOUSE FACILITIES

FOYERS

The foyer is a space for socialising, a space that is exciting and full of drama yet easy to navigate. The JPACF foyers are defined by the large rock walls through which they weave. The foyers have been detached from the theatre and pushed to the facade to allow patrons to see and be seen. This arrangement has also allowed us to reveal the rear wall of theatre and create a series of dramatic theatre entries accessed via bridges spanning over an impressive 14-metre-high cavern-like void.

In addition to its function as a gathering space for patrons, the foyer links the many internal functions in a clear and coherent manner and allows the performance, community and art gallery spaces to operate independently yet share support facilities such as lifts, stairs and toilets.

The main auditorium foyer is entered from either the forecourt or the carpark lobby. A grand stair leads to the Level 1 foyer which floats within a rocklike cavern. Access to the lyric theatre is provided via a set of bridges that traverse the void, while a portal provides entry to Level 1 of the community studios. The grand stair continues to the Level 2 foyer which also connects via bridge and portal to the auditorium and community studios respectively.

The foyers are sized to provide comfortable milling space for patrons during intermissions and before and after events, with bars and toilet facilities on each level, sized to accommodate the relevant patron numbers for each foyer level and located so as to avoid overcrowding during events.

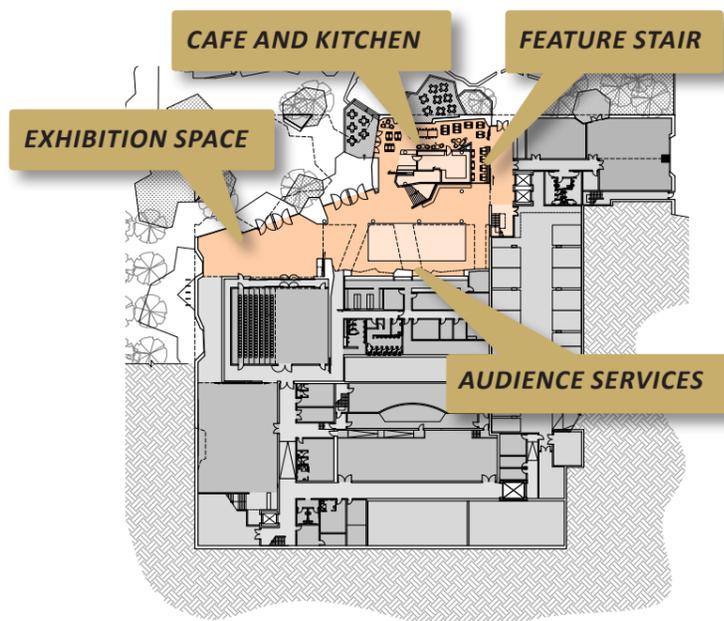
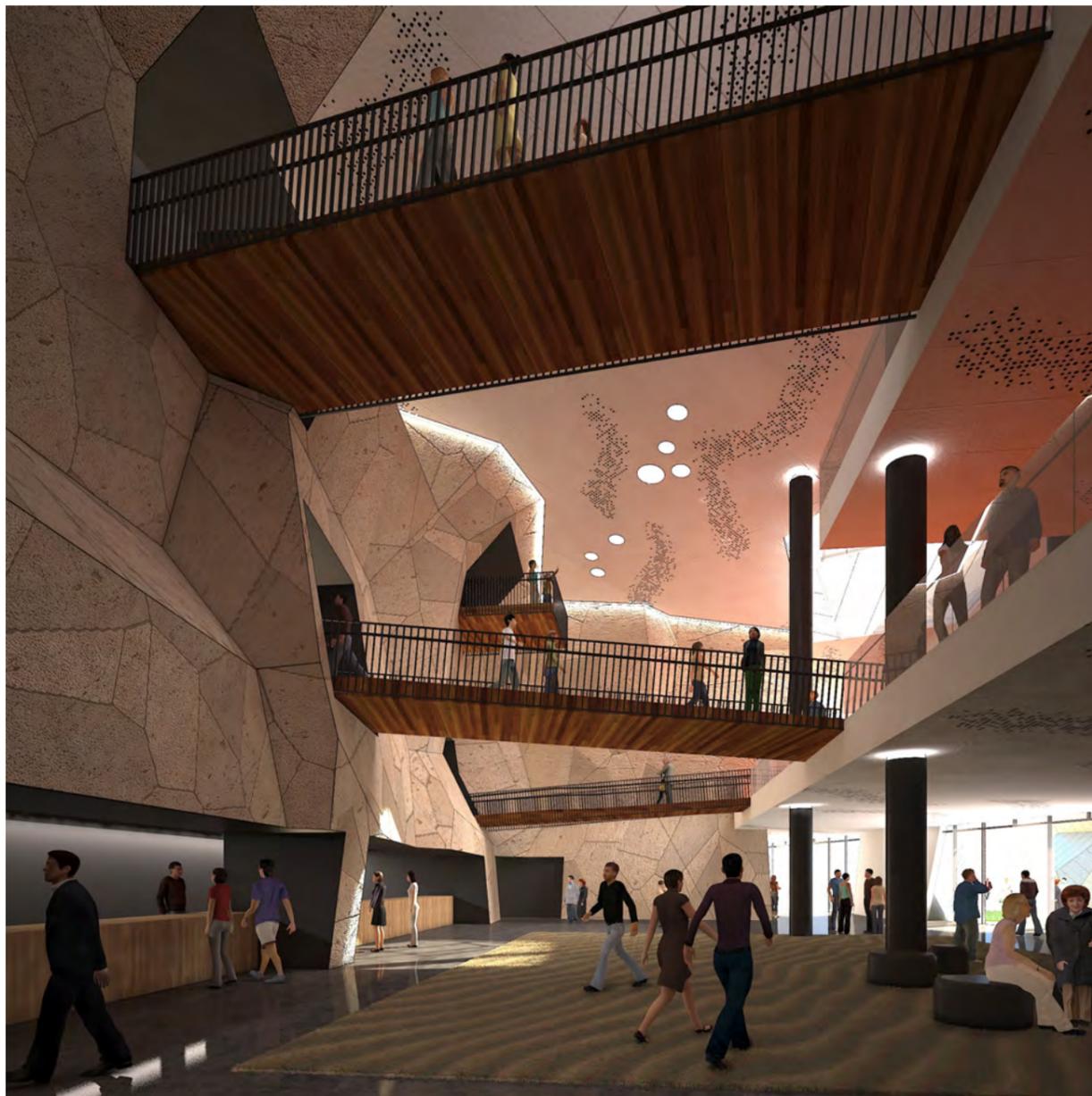
COURTYARD

The erosive façade tectonic forms a raised courtyard garden which allows the building users to physically inhabit the façade. Located on the northern facade between the main foyer and the community studios, the courtyard is ideally positioned to take advantage of sweeping views over the public plaza and Central Park to the north.

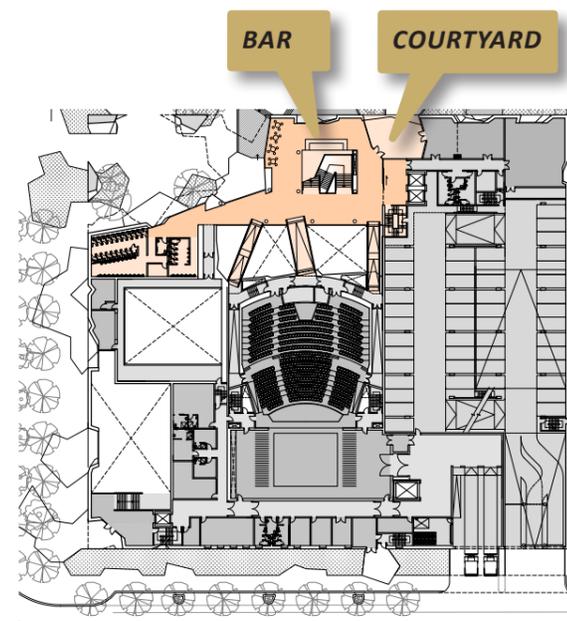
The courtyard provides a dramatic double-height external space able to be accessed over multiple levels. At Level 1, conference delegates and theatre patrons have independent access to the courtyard, and at Level 2 communal access is provided to a large balcony area. The adjacency of the main lifts ensures that all patrons have the opportunity to enjoy the unique experience that the courtyard provides.

EXHIBITION SPACE

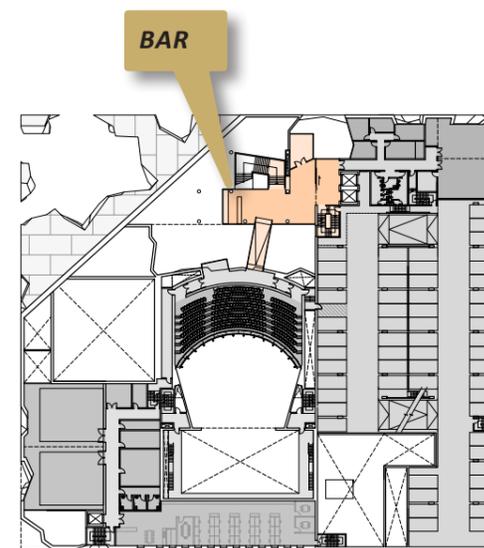
The western end of the foyer can be separated with a large operable wall, allowing it to operate as an independent foyer for the black box theatre, or as an enclosed 200sqm exhibition space. The main foyer can also be used for exhibitions and events. The foyer doors, fire and exhaust systems are designed to allow for cars to be displayed in the foyer, giving the facility the potential to host launch functions.



FRONT-OF HOUSE/ GROUND LEVEL



FRONT-OF HOUSE/ LEVEL 1



FRONT-OF HOUSE/ LEVEL 2

4.2 FRONT OF HOUSE FACILITIES

AUDIENCE SERVICES

The audience services zone is located on ground level directly opposite the main entry, and adjacent to the bar. It comprises cloakroom, ticketing and information services, together with office spaces for the box office manager and theatre manager and a small open office area. Combining all points of customer service into a continuous and multi-purpose zone allows for maximum flexibility – for example a larger box office before a show can be easily modified to a larger bar during intermission.

CAFÉ

The café is centrally located fronting Central Park, the ground level foyer and the community studios. The café is notionally sized for 90 patrons plus outdoor seating, and can be isolated so that it may trade separately to the theatres or community studios. This allows the café to operate as a separate business or as a subsidiary.

The café has direct access to the public plaza, allowing it to take full advantage of the northern facing aspect and passing foot traffic. Extensive alfresco dining areas are complimented by native tree planting adjacent to the facade, and shaded by the pinnacle elements surrounding the forecourt. The café has provision for a full kitchen which could support other areas with catering requirements such as the Level 1 conference facilities.

BARS

The auditorium is serviced by bars at each level. The ground floor bar is located adjacent the audience services, while Level 1 and Level 2 bars are located as elements within the respective foyers. The bars are sized so as to ensure that queuing depths do not exceed five patrons and are located so as to avoid patron congestion during peak periods.

TOILETS

The centre has a generous provision of patron toilets exceeding the BCA minimum requirements which are generally accepted to be insufficient for theatre buildings. The toilet numbers on each level are sized to suit the audience numbers of that level and are located to be discreet but readily accessible.





MATERIALS

The materials for the front-of-house interiors add another dimension to the concept of the eroded form. Drawing from the ideas of cave walks and rocky interiors, the design and finishes of the interiors create a sense of exploration, expectation and awe.

Floors

The floors at ground are mostly in-situ concrete slab with a finishing screed and jointing. Zones of special flooring included a large carpet area in the central space. Upstairs, the foyer levels are carpet throughout.

Balustrades, Stairs and Bridges

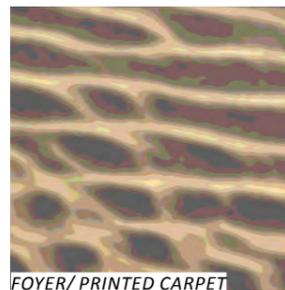
The stair is bright orange French polished, 2-pac paint with orange carpet. It visually attracts the eye on entry as it winds its way through to the upper levels. The balustrades for the upper levels are mostly glass, with simple rail detailing, contrasted with opaque bar areas on the upper levels. The bridge links are treated as walkways, clad in timber deck and open steel balustrading, to create a defined threshold before entering the theatre space beyond.

Walls and Ceilings

Wall finishes include a feature stone-clad wall outside the theatre, otherwise known as the 'rock-wall'. The stone is repeated around the cafe kitchen and the stair to the north. All other walls and ceiling finishes are generally plasterboard, with integrating lighting and acoustic treatment.



FOYER/ POLISHED
CONCRETE FLOOR



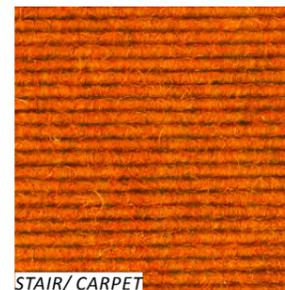
FOYER/ PRINTED CARPET



FOYER/ ROCK WALL



FOYER/ ACOUSTIC
PANELLED CEILING



STAIR/ CARPET



STAIR/ PAINT

4.3 LYRIC THEATRE

The form of the lyric theatre has undergone significant development since the 2013 competition phase. In order to ensure an intimate experience for patrons, the theatre proportions have been revised. An intimate experience is defined as the ability of a patron to connect with a performer on stage in a visual and emotional way. These revisions have resulted in the overall depth of the theatre being significantly reduced and the deletion of the balcony boxes. Patron numbers have remained at 850 and sightlines to the stage have been improved.

The lyric theatre will cater to events such as large school graduations, Eisteddfods, touring commercial theatre, contemporary popular dance, and premium music. The auditorium is arranged in an intimate single balcony format with an eight-metre proscenium. The arrangement of the theatre ensures that the space is scalable, which allows audiences of varying sizes to be accommodated. For example the lower stalls can accommodate an audience size of approximately 300 which allows for a high density of patrons in a smaller area.

The theatre is accessed via dedicated sound vestibules designed to prevent sound and light from public areas intruding into the auditorium. The stalls are accessed from Level 1 and the balcony from Level 2 through a series of processional bridges and ramps that allow universal access to multiple points of the auditorium. Universal access is also provided to the stage, for patron and performer use. The crying and control rooms are located at the rear of the stalls. A sound mix position associated with the control room is located within the auditorium.

The auditorium also includes a forestage lift which can be configured into a stage extension, seating or an orchestra pit.

SEATING

The auditorium seating is arranged in tiered rows of fixed theatre seats over two levels, stalls and balcony, with additional seating provided via rows of removable seats to the orchestra pit. The stalls are arranged on a stepped rake with a central entry point to provide access to the lower stalls. Within the stalls, seating access is provided via side and central aisles.

The balcony has a steeper rake than the competition scheme. The balcony has been bought forward to help create a sense of engagement with the stage, particularly for orchestral and choral concerts.

Seating on the orchestra pit is installed on mobile seating wagons that are stored under the auditorium in a dedicated seating store.

The theatre seating will be a mix of timber and upholstered surfaces, chosen for comfort, aesthetic, acoustic and durability properties. Seating is spaced at 1000mm between rows allowing space for comfort and ease of access. The seating arms will incorporate fully concealed aisle lighting designed to provide discreet low level lighting to the aisles.

STAGE AND FLYTOWER

The stage area includes the orchestra pit, stage apron, proscenium arch, acting area, prompt side wing, opposite prompt wing, stage floor, stage vestibules, and flytower. The stage floor construction allows for the central acting area of 14m x 6m to be constructed in a "bolt and nut" manner with removable flooring and joists so that areas of the floor can be dismantled and reinstated as required for production purposes.

The flytower is a tall volume over the stage and wings. The flytower is a large unobstructed area used for rigging and operation of scenery, curtains, and lighting. Air conditioning ducts, electrical cable trays, and other services will be run at high level where they do not obstruct the movement of scenery and stage operations.

LIGHTING AND CATWALKS

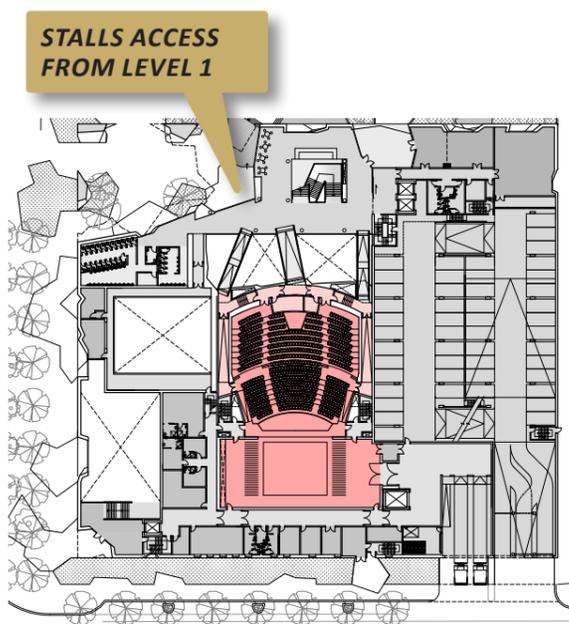
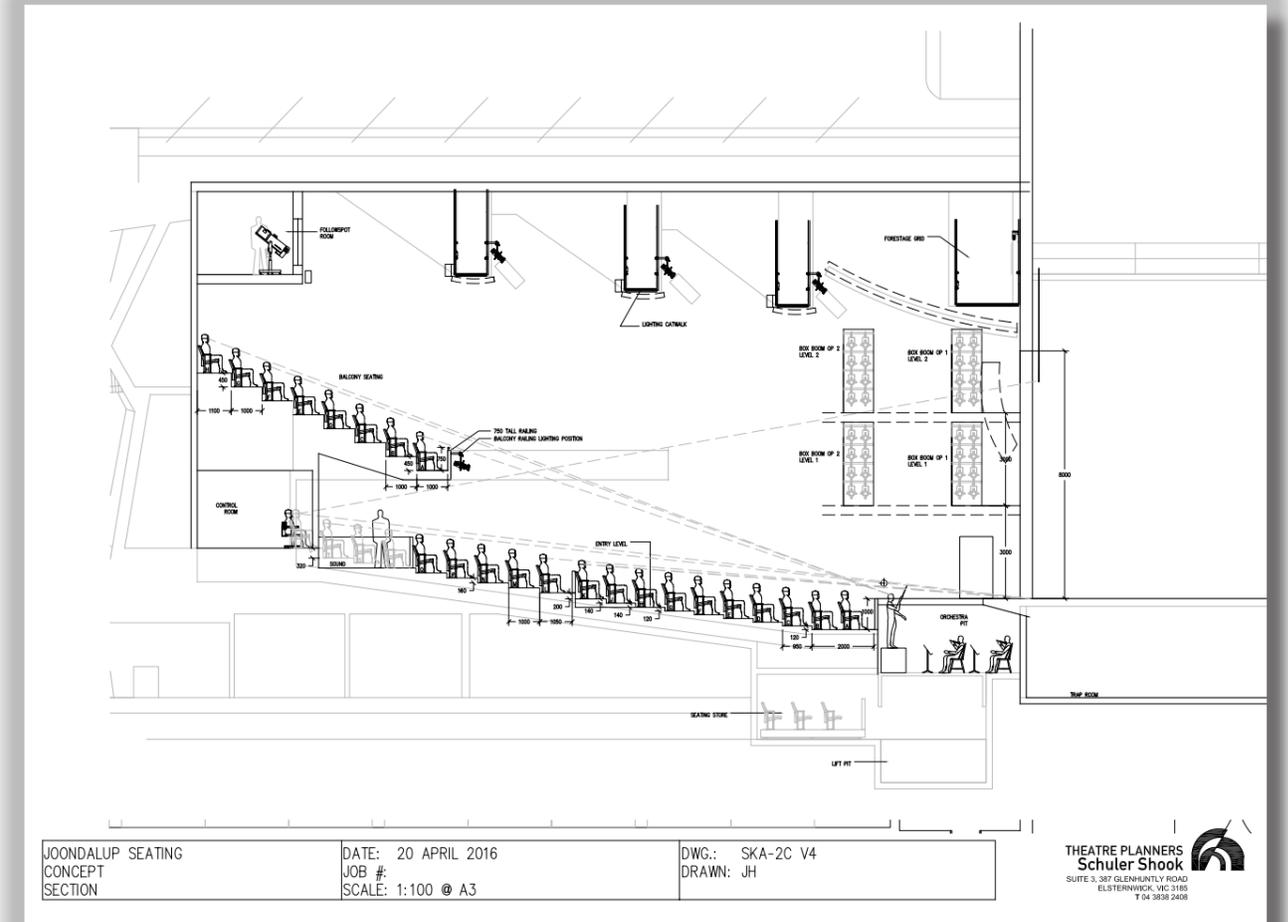
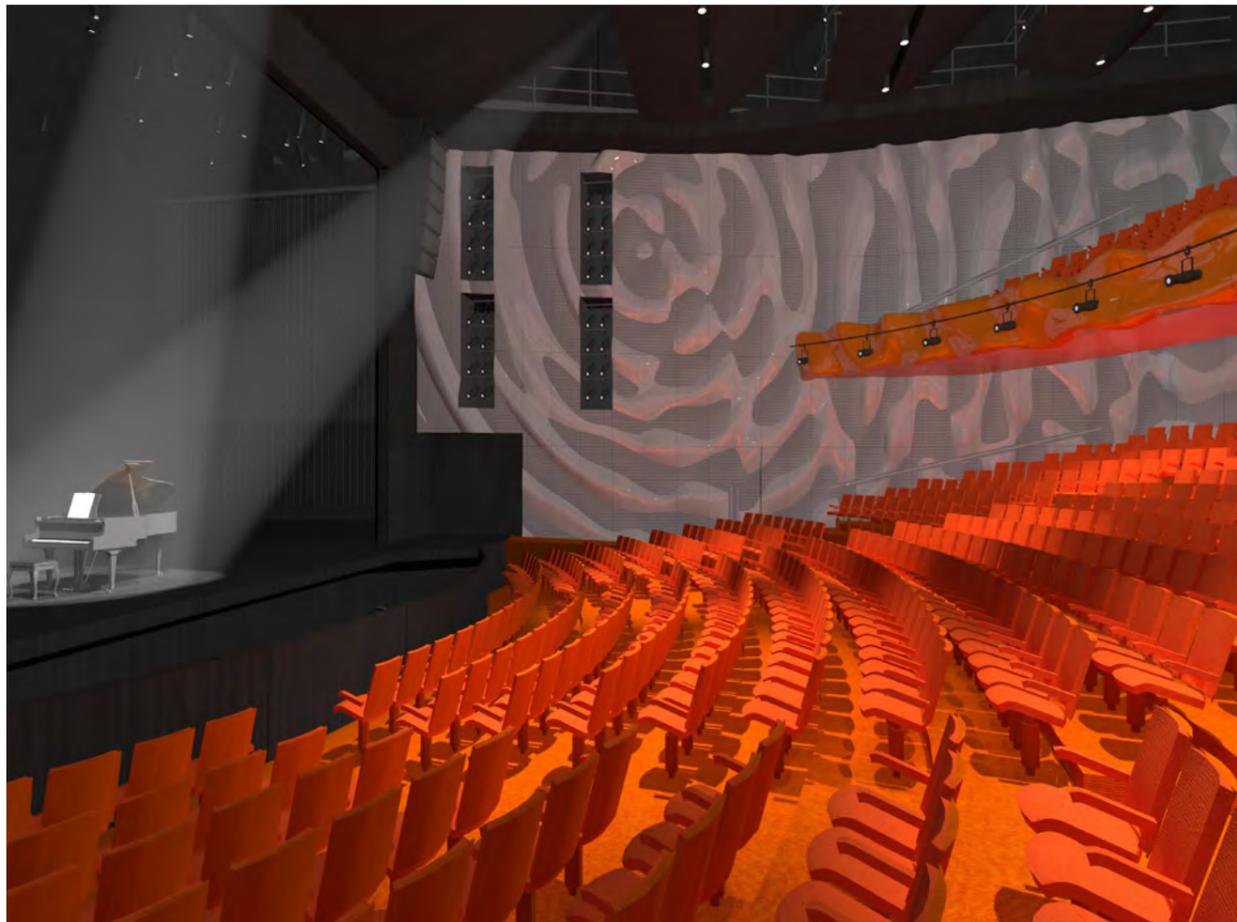
Typical stage lighting and technical positions are provided throughout the auditorium. All of the lighting positions are designed for minimal visibility, code compliance and safe access. The lighting positions are broken into four distinct areas.

A soundproofed followspot room is located above the balcony seating to the rear of the auditorium. This is the primary location for followspot operation.

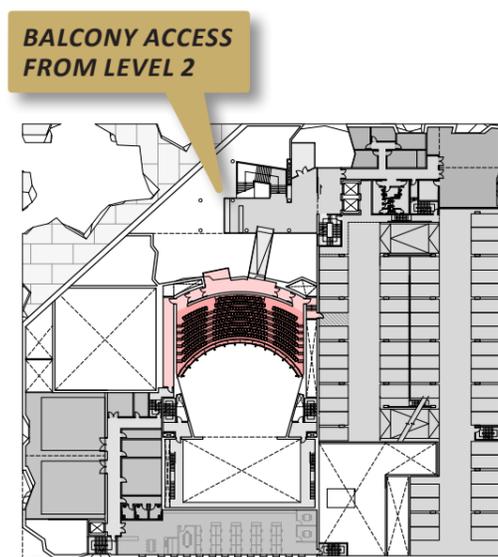
Three lighting bridges are accessed via an extensive high level catwalk system which allows for safe and easy access to all lighting positions over the auditorium.

Box boom lighting slots are provided to each side of the auditorium with a dedicated room behind the each lighting slot allowing for safe and easy access to the lighting.

A speaker bridge is provided above the orchestra pit to allow for speaker systems, temporary trusses and equipment for productions.



LYRIC THEATRE/ LEVEL 1



LYRIC THEATRE/ LEVEL 2

4.3 LYRIC THEATRE

ACOUSTIC DESIGN

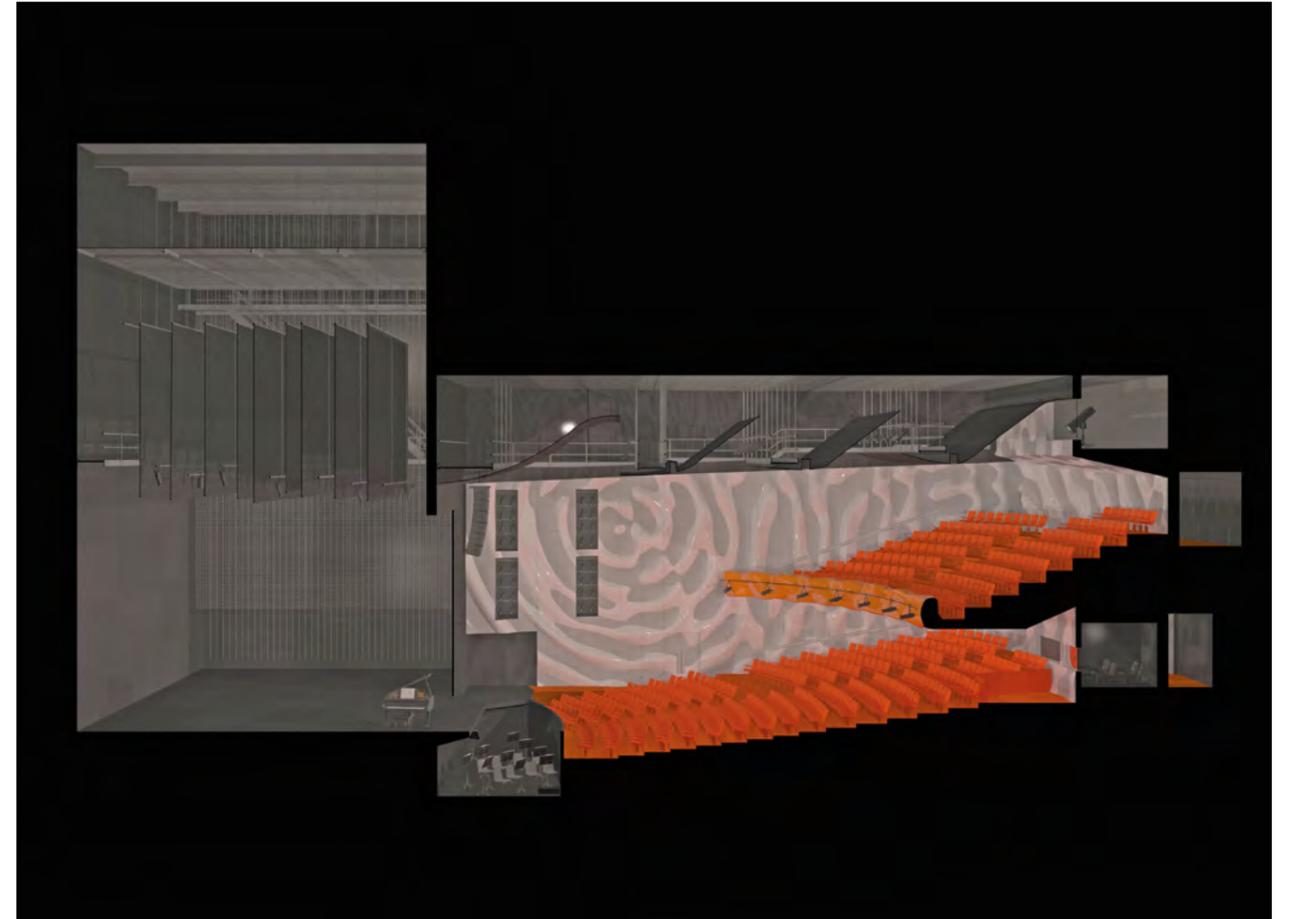
The primary acoustic design parameters for the lyric theatre are based upon its use as an intimate venue for spoken theatre. This implies a volume per seat of 5-7m³, a reverberation time of 0.9-1.1 seconds, a speech transmission index of > 0.55 at 80% of the seats, speech clarity of > +1dB and a loudness criteria of > 0dB. These values also prove ideal for dance presentations with pre-recorded accompaniment and amplified concerts.

In order to review the performance of the lyric theatre, Marshall Day Acoustics have undertaken a computer analysis of a 3d model of the theatre supplied by ARM Architecture. This analysis has confirmed that the proposed theatre falls within the parameters described above.

The computer analysis also highlighted two areas of concern regarding the form of the ceiling and its impact on the distribution reflected sound in the auditorium and the treatment to the front edge of the balcony and the potential for unwanted reflected sound. In order to address the concerns regarding the ceiling form a series of curved ceiling panels that evenly distribute reflected sound have been introduced. This will result in a more even acoustic quality throughout the auditorium.

The front edge of the balcony has been altered to diffuse, absorb and reflect the sound energy so as to avoid the potential for image shift for patrons at the front of the lower stalls.

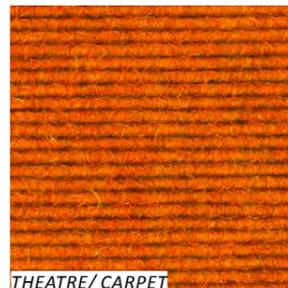




THEATRE/ WALLS



THEATRE/ ACOUSTIC
PANELLING



THEATRE/ CARPET



THEATRE/ STAGE FLOOR

MATERIALS

The design for the theatre interior draws on the concept of water eroding the limestone block, as well as linking back to the origins of the name 'Joondalup'. The ripple pattern on the theatre walls is formed of milled MDF, a process similar to that used on the Melbourne Recital Centre interior. The theatre floor and seating tie to the bright orange used on the stair.