

### DESIGN STUDIES 4B - AB419

**To Care S** – Detailed internal study **To Care L** – Final design proposal

Presentation Booklet

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To Care S – Detailed internal study







The Bird that flew

A twist on 'The bird that did not fly'



The Bell that rang

A twist on 'The bell that did not ring'

A twist on 'The fish that did not swim'

### Narrative and Symbolism

The narrative is a connection to the beginnings of Glasgow and a city and an exciting exploration of story telling of the patron saint of founding father St Mungo on the riverbanks of the Clyde. The bell tower explores symbolism where the 4 miracles, as seen below, are developed into physical space, materials and details that the user may experience as they journey through the space. Many elements have been designed with the narrative in mind to constantly remind the user of the story being told, which allows them to make their own connections, experiences and feelings towards what their journey was like.





The fish that swam

The Tree that grew

A twist on 'The tree that did not grow'



#### Design development

The initial approach was to develop an existing struct on the site that would act as a main gateway or symbolic piece that captures the narrative or importance of the space for all the witness, interact and feel connected with. Initially, a coffee shop was proposed linking to a tower with an observation deck. Through linkages to the previous development stages of 4A, this space now progressed into a symbolic bell tower that connects the story and the people to the build to create a sense of community and belonging.





#### **Design development**

The project progressed into the intimate smaller space of the bell tower house where an observation deck would allow the public to access the bells, interact through ringing and observe the city. Further details and exploration of the journey into, up, around, down and out of the tower was explored to captivate the fully experience of what this tower is like and why it is important to the people and of Glasgow.











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#### **Bell Tower Floor Plan**

Drawn at 1:50



#### A2 Rendered

Bell tower observation deck Drawn at 1:20 A2

The internal space is highly detailed and has significant moments that touch on the narrative of St Mungo's miracles. This narrative not only creates a beautiful story to interact with in this particular space, building and landscape but also creates a connection to the history, heritage and beginnings of Glasgow as a city.

In the small space the stone and cast iron contrast, heavy materials above and below surround the public as they walk across the deck. The over mechanised elements have been purposely designed for people to interact visually and engage with the elements on many levels to create an immersive experience unlike any other in Glasgow

- 1. Timber floor construction connected to stone wall and steel structure
- 2. Elevator shaft
- 3. Custom door handle with security gate around shaft
- 4. Decorative stone panel detailing the narrative
- 5. Platform and telescope for observing the city
- 6. Stone barrier with glazing
- 7. Stone lintel connected to window structure
- 8. Monolithic blonde sandstone structure
- 9. Stained glass windows with decorative narrative visuals
- 10. Bells for one of each of the miracles
- 11. Pully system and mechanics of the elevator
- 12. Bell mechanism for self ringing leavers
- 13. Support mechanics for the bells
- 14. Slight pitched roof with skylight
- 15. External stone lintel
- 16. Protective barrier as seen in point 6.





#### Design details

Bell tower observation deck Drawn at 1:10 and 1:5



The bell cord Drawn at 1:10 – A4

The bell mechanics Drawn at 1:10 – A4

An important moment in the architecture – The bell cord allows one or two people together, either strangers or not to interact together by pulling the cords to ring the bells. This action allows one or more people to interact together and become connected through the space and the story

Detailed mechanics and mechanisms are displayed to express and celebrate all the function pieces of the building, all on display for the public to witness and appreciate

#### Design details

Bell tower observation deck Drawn at 1:10 and 1:5









Elevator decorative framework Drawn at 1:10 – A4

The narrative bells Drawn at 1:10 – A4

Displayed in detail carrying their own individual importance representing one of the 4 miracles of St Mungo. They reside at the top of the tower where the public can ring as they overlook the city

The narrative is strong in the design as it is expressed in many elements of the internal space. As the public move around the building they reach moments where these symbols suggest a particular space may symbolise a purpose related to the narrative



#### Design details

Bell tower observation deck Drawn at 1:10 and 1:5



### Drawn at 1:10 – A4

A moment in the architectural space where the user will interact with the door to both enter and leave the space where the handle is celebrated as it opens a portal from one space to another

### Drawn at 1:10 – A4

Aged to represent the robustness of the city, contrasting with the fragility of the stone in the building, the elevator is the vehicle in which the narrative is explored further through decorative designs in the glass and elevator framework – A constant reminded as you proceed around the tower



### Vintage elevator

#### Inspiration

Visual aids of various towers and structures across the world were observed upon the exploration of conceptual approaches to the internal and physical space of the bell tower. By observing the historical, vintage and conceptual, a understanding of how the project was able to be approached was reached. The project space was experimental and explored a variety of options to capture an exciting, explorative and interactive journey for all who come together at the People's palace

The bell tower acts as a welcoming aid but also a sentinel that watches over and guards the people and the city

















<sup>6</sup> Giotto, Andrea Pisano, Francesco Talenti: Campanile. Elevation, plans, and cross section (engraving by Sgrilli)





Updated final proposal Drawn at 1:100 A0



Antony James Granam Design Studies 4B S: Internal study - Bell tower + Observation deck A1 at 1:50 scale





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#### **PEOPLE'S PARLIAMENT AND FORUM** – UPDATE

The development process undertaken since the previous proposal has taken the project in a direction that aims to provide spaces to support the local and traditional cultures, history, heritage and events that allow the public to participate, operate and learn from. The final proposal takes the form of a series of forum spaces, revolving around public orientation, that serve various functions under the needs of the city and the people. The building offers a civic and cultural programme that engages with the citizens of Glasgow on an education, cultural and political level, enabling people to learn, grow and be heard. Whether it is attending an event, gathering to meet friends or sitting down to discuss personal or join in public debates, the building and the programmes allows for these actions to happen.

The building aims to offer experiences and journeys into the history, heritage, culture and political change of Glasgow and by giving the building a status of a 'city chamber' people's parliament status, the people will be in power and will be heard.





**Initial diagrams –** The aim was the conceptually develop a plot of land that would regenerate the waterfront area to bring people together the people through a programme of forum spaces of culture, politics, history, heritage and entertainment.



Initial diagrams – People's Parliament was an initial approach that resurfaced during the development stage



Lesuire and entertain

Local Arts and Cultur



Safety and security







Building programme diagrams - Meeting the requirements set initially to ensure a strong sustainable caring project















Heritage and History



#### **SCHEDULE OF ACCOMODATION** + building function and area

Basement plan programme: OVERALL AREA = 1130.36 m2

Circulation space: Admin office: Admin staff room + toilet: Bar/Café: Foyer: Library shop: Cloakroom storage: Gallery 1:	135.55 m2 60 m2 18m2 91.2m2 40m2 83.7m2 58m2 84.36m2 67 2m2
Gallery 3:	51 52m2
l arae forum aallerv:	211m2
Toilets: (Including staff)	97m2
Commercial unit 1:	49.29m2
Commercial unit 2:	92.95m2
Commercial unit 3:	22.8m2
Commercial unit 4:	28.49m2
Staffrooms:	45.84m2
Plantroom:	54.6m2
Storage:	19.91m2

#### First floor plan programme: OVERALL AREA = 1721.56m2

Circulation space: Stone gallery: Ext. cinema space:	253.66m2 174.76m2 52.5m2
Gallery announcement space:	18.9m2
Picture gallery (main events forum)	178.71m2
Check in desk/info:	9.12m2
Discussion pods:	28m2
Lecture room:	30.15m2
Grand hall:	109m2
Parliament forum:	290m2
Workshops 1:	63.84m2
Workshop 2:	59.8m2
Workshop 3:	63.84m2
Prep area:	16.2m2
Cloakroom/rec area:	15.64m2
Studio forum:	116.82m2
Studio 1:	8.55m2
Studio 2:	8.55m2
Studio 3:	8.55m2
Lecture hall:	63.27m2
Library:	71.4m2
Group study discussion rooms: (ALL)	23.12
Discussion pods (All)	40m2

Circulation: 1 Draught lobby 1 Reception + Stone gallery: 2 Admin office: 2 Community entrance: Bar: 5 Flexible room 1: Flexible room 2: Café: Community room 1: Community room 2: Public gallery: Discussions rooms: Obby: Interview rooms: (all) Discussion forum: Records storage: Ground floor forum chamber: Chamber reception: Parliament office: Garden circulation: Circulation stairs: (garden) Main forum events space: Community atrium: Auditorium:	17.76m2 1.22m2 23.42m2 26m2 17.86m2 71m2 38m2 38m2 66m2 31.54m2 26.96m2 72.8m2 64m2 23.22m2 21.65m2 64m2 23.22m2 21.65m2 6.2m2 21.6.6m2 12.6m2 18.8m2 156.7m2 34.77m2 443m2 139.65m2 175.95m2
Rep pubic offices (ALL)	183.83m2

Ground floor plan programme: OVERALL AREA = 2407 m2

First floor plan programme: OVERALL AREA = 664.64m2

Circulation space: 38.03m2 Public viewing gallery: Community gardens roof: Contemplation pods: Garden zone: Rooftop cinema and bar:

130.72m2 56.65m2 14.51m2 19m2 234.23m2



TOTAL BUILDING FLOOR AREA: 5923.76 m2

Official titles: People's Parliament – Palace of the people

Function and purpose: Development in education, culture and community based debars, discussions and decision making through parliamentary forums with representatives

Client: General public/ All

**Operated by:** Community and council based operations

### ADDITIONAL RESEARCH AND DEVELOPMENT - The stone city, architecture and influences

The stone city and the architectural forms, facades and materiality of Glasgow has inspired and influenced the design process in various areas of the project. Actions taken to respectfully acknowledge the surrounding stone context and important presence of historical heritage buildings, sites and areas encouraged the building to explore a vast pallet of forms, characteristics and styles to create a building of stone, atmospheric spaces and beautiful areas for the public to relax, gather and be in a place of their own.





**Tenement form** 



Glasgow grid and façade influences



A DINDEVIA // 2, XINVLE GENG // 3, JACK BRAINBENT // 4, KETAKEE CHUHHAN // 5 ELIDH CALCOTT // 6 PATROX ALBANA // 7, INTONY GRHHAM // 8, ANDRENY MALEAN // 9, DILLON MOPHELM // 10, VLADMRY BEZONLEBA // 11, TARRA ANTONA // 12, ALLEGRA VENTBEI

**Glasgow city** – The urban grid, stone facades and tenement bay windows played a critical part in the development process of the project. Becoming part of and responding to the stone city was one of the main responses that is visible in the elevations and internal special design

**Stone City –** The remnants of the stone city only. In this updated plan, the proposed design is situated on the site with additional important civic buildings addressed along the River Clyde



#### PRECEDENT RESEARCH - MIES VAN DER ROHE / DAVID CHIPPERFIELD / ALVAR AALTO









Raise plinth ground floor



Reading material research

Mies Van Der Rohe - New National Gallery Berlin, Germany: 1962 - 1968

#### Free space and forums

Mies's experimentation with free space and open plan architecture paved the way for a new style of architecture that lead to various accomplishments in the field. His new national gallery which demonstrates the process of an open plan, column free space that appears functionless opens the space up for multiple uses. All other amenities are stored away in the basement. A similar approach was adopted in the design process to experiment with how spaces are affect with open free plans. In some respects, certain areas demonstrate the process well but others were inspired by structural qualities that enhanced the space. The option for these spaces to remain open and flexible allows the function to remain free and at the hands of the user. Mies's minimal but intelligent approach inspired the start and the ending of the entire process that lead to where the research has concluded.

#### PRECEDENT RESEARCH - MIES VAN DER ROHE / DAVID CHIPPERFIELD / ALVAR AALTO

David Chipperfield James Simon Gallery Berlin, Germany 2018/19









Free space and forums



Sketch development of precedent to understand space, materiality and process

proposal

#### Free space and forums

The James Simon gallery has been a favoured precedent through the entire design process. The admiration for Chipperfield's usage of white colonnade pillars on the exterior and rich beautiful walnut and other woods that contrast with the raw concrete and white interiors is a perfect blend of internal quality and atmospheric spaces. Further studies into Chipperfield's work allowed the process to understand how hierarchy of the spaces with the concept of an open public floor functionless but a public realm was interesting and influenced the approach of the front main spaces of the building proposal. Chipperfield's use of materiality in such a historical context allowed the process to think about the impact on the stone, history and heritage impact of the city, which lead to the approach of having a stone facade to respect the stone city.









Reading material research



Floor plan sketching to apply similar approach to design

#### FURTHER RESEARCH - MIES VAN DER ROHE / DAVID CHIPPERFIELD / ALVAR AALTO















Reading material research

Alvar Aalto Town hall, Library and housing Saynatsalo, Finland 1949

Alvar aalto's town hall in Finland was a critical precedent to assist in the special organisation on site and internally for the building programme. His approach to laying out the programme situated around a central courtyard with internal circulation was a key influence in the proposed design. His hierarchy choice to make the town hall chamber raised up as a tower is symbolic and gives the space importance which enabled the creation of the main spaces in the proposed design to be situated higher up in a separate entity of the building. From the outside, sitting by the water, the main spaces would be a celebrated entity of their own but remain connected to the rest of the building and programme. Aalto used beautiful timber and masonry materials in his building which, with the effects of light and shadows, casts a warm and inviting atmosphere that makes you want to explore the building. Through a similar approach, using timber and stone, a similar approach was adopted to create similar effects

#### **DEVELOPMENT PROCESS** – Building evolution





**Development into form and programme –** Narrative, programme and hierarchy established on site with influences from precedents

### **DEVELOPMENT PROCESS** – Final proposed design evolution













#### **DEVELOPMENT PROCESS** – Final proposal layout - CAD









4. Form and massing







6. Forum shaping

- 7. Carving and shaping spaces
- 8. Direction change



111



9. Detail forming



#### 12. Spatial hierarchy taking shape over floors

#### **SITE ANALYSIS DEVELOPMENT** Sketch process

The urban strategy expands from Buchannan street and reconnects with the newly establish public forum by the river. The diagram below shows the powers of the city chambers moved to the people's parliament, significantly placed by the river to establish history and heritage links, while being the main destination point through the green urban route. The narrative allows the public to explore views and experiences with gardens, nature, water, views and sounds in and around the city, an experience that is different and exclusive for all to be part of.





**DEAD SPACE REGENERATED AS** NEW CULTURE AND LEISURE HUB

EMERGENCY ACCESS ONLY

CUSTOM HOUSE

OLD STONE FACADE FACING STONE CITY

NORTH WEST AXIS

PEDESTRIAN ACCESS

The site has adapted from a series of pavilion boxes and a large stone massing that was situated in the centre of the River Clyde. Through rigorous research, investigation and precedent observations, the concept has developed into a programme that revolves around spaces dictated by public use. The massing and contextual approach has been navigated on the contextual street wall, existing masterplan forms, materiality and Glaswegian architectural characteristics that are expressed in the buildings façade. The proposal aims to ensure public space and public use is entirely suited to their needs with a variety of amenities that engage with cultural, political, social and entertainment amenities to bring the public back to the riverfront with a building that serves them

SITE ANALYSIS DEVELOPMENT

Final approach

EAST SOUTH AXIS



URBAN GREEN ROUTE

VIEWS UP BUCHANAN STREET AXIS

BELL

TOWER

ROAD REMOVED TO STENGTHEN

VIEWS

BELL TOWER LIFEWS POOS CITY

ARDEN

OLD STONE FACADE FACING

#### **UPDATED URBAN STRATEGY**

The integrated building proposal remains situated and the point of two axis meeting from the NS and EW orientations. The green route, city centre and the river Clyde connections are strengthened by creating a continuous line from the top of Buchanan street to the frontage of the river by pedestrianizing parts of Clyde street.

By eliminating part of the road, the division between the city, the river and the space between is no longer a problem. The area now belongs to the public and creates a strengthened fluid access to and from the city and the river via either direction. The routes are injected with natural greenspaces, public zones for congregation and general meeting and activity areas for complete public use.



2.

Site massing diagram



Axis diagram



Urban strategy visuals revisited







Urban strategy with final proposed design







CURTILAGE PLAN Drawn at 1:100 A0



- 1. Connection to urban strategy from St Enoch's
- 2. Stream and garden areas for gathering and socialising
- 3. St Enoch's historical stream water feature
- 4. Public pedestrian Clyde street area
- 5. Custom house forum
- 6. Pavilion space for gathering
- 7. Side entrance off street under Aalto style timber canopy
- 8. Main entrance raised up off street level
- 9. Public community entrance off Custom house forum
- 10. Public food and cinema court for cultural and leisure activities
- 11. Aalto inspired timber canopy sheltering forum and seating areas
- 12. Ramp and staircase down to gardens and lower riverfront seating
- 13. Axis walkway along River Clyde joining onto site
- 14. Retaining wall around site to prevent flooding
- 15. Lowered walkway to water platform and seating N

35m



#### CONTEXTUAL ELEVATIONS North facing elevation – Drawn at 1:100 A0



The north facing façade addresses the stone city of Glasgow, standing as a solid form constructed from sandstone tiles resembling features of Glaswegian architecture such as the bay window. The form is a repetitive feature that characterised the building as a symbol of the city and a place for the citizens to call their own

1	15m	5m	0m

EXPANDED CONTEXTUAL ELEVATION North facing elevation extents – Drawn at 1:500 A1



EXPANDED CONTEXTUAL ELEVATION – OLD STONE FACADE North facing elevation extents – Drawn at 1:200 A1





#### CONTEXTUAL ELEVATIONS South facing elevation – Drawn at 1:100 A0



The southern façade shows the variety of various scales, forms and material influences from the city and precedents of Mies, Chipperfield and Miralles to create a grand civic structure on the banks of the River Clyde. The two main chamber forums that hold the primary and secondary public and representative forums are key features. The tower observes the entire site, creating a focal point for congregation, orientation and to provide beautiful views of the city.

#### CONTEXTUAL ELEVATIONS



East facing elevation – Drawn at 1:500 A0



South facing elevation – Drawn at 1:500 A0





The Western façade showcased the commercial court where the old riverside amphitheatre is replaced with a new tiered seating and platform public realm where food and leisure is on offer during the day and at night serves as an outdoor cinema venue. All year round the space allows the public to gather and feel part of a space that is surrounded in culture and entertainment by the water. The repetitive tenement bay window feature is continuous in this area to create an interesting and abstract pallet of materiality, form and atmospheric space

35m	15m	5m



#### 3D CONTEXTUAL MODEL – Spatial layout and overall massing



**3D Axonometric model** – Southern façade facing River Clyde





**3D Axonometric model** – Internal layout of basement and ground floor

#### 3D CONTEXTUAL MODEL



**3D Model –** City centre 500m from the River Clyde rough massing with building in context



**3D Model** – The building was lowered down to respect the stone architectural context and be more of a monument than a landmark tall building. The bell tower is the tallest aspect of the building to be a beacon of congregation, light and hope, symbolising a place of comfort, guidance and freedom.



**3D Model –** The building sits just below the height of the custom house listed building. The building programme focuses on being functional and responsive to the community



**3D Model –** Massing representing the tenement bay window form to create a familiar and fitting massing to weave into the urban fabric of Glasgow architectural form

#### BUILDING EXPLINATION DIAGRAMS







**3D Model –** Building programme can change and function to a day and night programme to allow for a larger variety of people to get involved



Division of space - Overlay of space function

**3D Model –** Representation of spatial layout and massing

#### **BUILDING EXPLINATION DIAGRAMS**



First floor accessibility, circulation and function



Basement floor accessibility, circulation and function





- FORUM/CHAMBER SPACES CIRCULATION HIGH TRAFFIC ZONES
- EXTERNAL PUBLIC GARDENS
- FIRE/ EMERGENCY ESCAPE
- MAIN ACCESS
- LEISURE AND COMMERCIAL COURT

PUBLIC FREESPACES

Upper First floor accessibility, circulation and function

Ground floor accessibility, circulation and function

#### TECHNICAL AND ENERGY STRATEGY



#### **THERMAL MASS / THERMAL BLINDS**

Thermal blinds and shutters will allow an amount of heat to be retained in the building the minimise heat loss during the winter and colder months. The sandstone tiles and hempcrete insulation will allow heat to be retained and redistributed back into the building assisting both natural solar gain and mechanical assisted heating strategies



#### MVHR – Mechanical ventilation and heat recovery





Thermal blinds and shutters will allow an amount of heat to be retained in the building the minimise heat loss during the winter and colder months. The sandstone tiles and hempcrete insulation will allow heat to be retained and redistributed back into the building assisting both natural solar gain and mechanical assisted heating strategies



#### SOLAR GAIN SOUTH FACING WINDOWS / GLASGOW WATER GRID

An additional heating strategy to assist the MVHR and thermal mass is the southern facing large windows in workshops or circulation spaces will allow southern solar heat to be extract by the MVHR and distribute back into the building. The thermal blinds will allow the building to cool to avoid overheating. The main water strategy will be to adopt the usage of the Glasgow Scottish water grid to provide fresh clean water to all amenities. In addition to this, an additional proposal is to adopt a greywater recycle system to flush toilets saving water wastage as well as using low flush toilets



LED LIGHTING / NATURAL LIGHT / GLASGOW POWER GRID/ PV PANELS

The main lighting strategy will allow the building to use a variety of options to ensure it is sustainable, low carbon and low energy use. The building will use LED motion and timed lighting technology to control the amount of artificial light. Large skylights allow natural light to flood into all the main spaces. PV panels provide additional support that supply power to the building when needed. The main source of electricity will be generated from the Glasgow power grid.

#### NATURAL /MECHANICAL VENTILATION

Both natural and mechanical means of ventilation are proposed for the building to ensure occupants have control of how their spaces are ventilated. Air quality and occupant physical and mental conditions are key to ensure the building is healthy and poses no risk to the user.





#### **UN Sustainable development goals**

The Un sustainable goals highlighted above have been selected to point out the various areas that the proposed building design consists of could meet these various goals. By supplying a programme of education, upskilling and open facilities for the community to learn, grow and work ensures that people can learn, work and improve their status. The building strategy and material selection has the opportunity to be part of sustainable communities, be low carbon and energy consumption

# **Double/Triple Glazing**



Don't worry ..... I'm still here. Aye



DON'T WORRY, I'M STILL HERE

#### **TECHNICAL DETAILS**



#### **1:5 FOUNDATION TO WALL DETAIL**

DRAWN AT 1:5 A1

- 1. Primary structure 150 x 650 glulam beam connected to glulam 150 x 350 column
- 2. Glulam support structure
- Stainless steel glulam beam hanger attached to primary 3. beam
- 300mm CLT floor structure cantilevered into monolithic 4. hempcrete wall to support secondary CLT structure
- 20mm lime screen placed on top of CLT floor 5.
- 25 x 25 timber baton floor space for fittings 6.
- 15mm wolfboard sound insulation 7.
- Timber floor finish 8. Timber skirting board 9
- Wall build up consisting of 12.5mm plasterboard x 2 on 10. 50x 50 timber batons with service gap applied to 20mm lime render
- 11. 500mm monolithic wall structure with 200 CLT secondary wall structure supported on CLT flooring, bolted and secured by steel tie to glulam column. Finished with 20mm lime render
- 12. Glulam column 150 x 350
- 13. Steel L shape brackets bolted to floor securing CLT wall
- 14. Steel wall tie
- 15. Brick wall tie back to CLT structure
- 16. 50mm ventilation gap with masonry wall build up, 10mm mortar screed and sandstone blonde tile finish





2.

3.

4.

6.

8

9.

10.

11.



# 1:5 FLOOR TO WALL DETAIL

**DRAWN AT 1:10 A3** 

- **1:5 ROOF TO PARAPET DETAIL** 
  - DRAWN AT 1:5 A1

- Earth
- Foundation pad with steel rebar connecting to pile foundation
- 300mm of Hardcore
- 200m sand binding level
- 350mm thick concrete raft foundation
  - Foundation expansion joint to combat forces
- Damp proof course
- Hemp quilt insulation support structure for non structural hempcrete insulation
- 400mm hempcrete insulation Foundation strip 1500mm below ground
- 10. 11. 50mm lime screed
- 15mm wolf board sound insulation 12.
- 13. 20mm finished floor detail
- 14. Timber flooring
- 15. Timber skirting board finishing wall footing
- 16. 600mm monolithic hempcrete wall with primary and secondary structure encased
- 17. 150x250 glulam column raised on stainless steel footplate bolted to floor
- 18. 200mm CLT secondary structure bolted to glulam structure and bolted to concrete foundations.
- 19. 20mm lime screen
- 20. 50mm ventilation gap
- Brick tie bolted to internal CLT structure 21.
- Masonry brick façade with 10mm mortar screed and blond sandstone finish 22. 23. Internal wall finish with cavity spaces for fittings
- Steel tie bolting CLT to glulam structure 24.
- 25. Hardcore concealing drainage

- 1. Primary structure 150 x 650 glulam beam connected to glulam 150 x 350 column with 200mm hempcrete insulation filled by specialist for roof insulation. Glulam support structure
  - Stainless steel glulam beam hanger attached to primary beam
  - 300mm CLT floor structure cantilevered into monolithic hempcrete wall to support secondary CLT structure
  - 20mm lime screen placed on top of CLT floor
  - 25 x 25 timber baton floor space for fittings
  - 15mm wolfboard sound insulation
  - 180mm ridged wood fibre thermal insulation Timber skirting board
  - Waterproofing sealant and protective fleece
  - 50mm gravel
  - Protective seal and finished surface water filtration to be installed. Roof to be at 5 degree angle
- 12. Protective lead flashing over timber structure and monolithic parapet structure
- 13. 25x25mm timber baton structure secured to insulation
- 14. 100mm recycled foam glass insulation
- 15. Monolithic hempcrete insulation parapet with additional 200mm mixture to ensure thermal performance quality with glulam column encased in parapet
- 16. 200mm CLT secondary structure bolted to cantilevered CLT floor structure
- 17. Stainless steel L brackets securing CLT structure to floor
- 18. Steel bracket securing CLT wall to Glulam column
- 19. Steel brick tie back to CLT structure
- 20. Masonry wall build up with 10mm mortar screed and blonde sandstone tile finish
- 21. Lead flashing capping over top of parapet for waterproof protection
- 22. Timber blocks for structural support and bonding to
- 23. Lead flashing over parapet edge



**STRUCTURAL GRIDS** – Primary structure - 150 x 650mm Glulam timber beam / 150 x 350 Glulam Column - 300mm thick concrete core staircases and elevator shafts provide anchorage for beams



First floor structural grid – Drawn at 1:200 A0

### LOWER BASEMENT PLAN Drawn at 1:100 A0

- 1. Fire lobby and circulation core
- 2. Admin office
- 3. Admin staff room and accessible toilet
- 4. Bar and refreshments
- 5. External colonnade around public gardens
- 6. Processional walkway to bell tower
- 7. Garden furniture
- 8. Bell tower entrance over water
- 9. Foyer
- 10. Library shop
- 11. Cloakroom and storage
- 12. History and heritage galleries
- 13. Elevator access
- 14. Male staff toilets
- 15. Female staff toilets
- 16. Female public toilets
- 17. Plantroom
- 18. Male public toilets
- 19. Accessible toilets
- 20. Storage
- 21. Large open gallery forum space
- 22. External forum of columns
- 23. Market freespace under building
- 24. Retaining wall from river
- 25. Fire escape stairs to outside
- 26. Freespace market forum
- 27. Commercial unit 1
- 28. Commercial unit 2
- 29. Commercial unit 3
- 30. Commercial unit 4
- 31. Staff rooms and facilities
- 32. Storage/bin storage
- 33. Timber canopy
- 34. Cinema screen structure
- 35. Fire escape from
- Auditorium space



# **UPPER BASEMENT PLAN** – External forum space Drawn at 1/100 A0

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- 1. Staircase access from basement level
- 2. To be heard and to hear forum space
- 3. Bell tower
- 4. Chamber wall structure



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#### **GROUND FLOOR PLAN** Drawn at 1:100 A0

- 1. Entrance draught lobby
- 2. Café commercial unit with external seating forum
- 3. Reception in permanent stone gallery
- 4. Flexible media space 1
- 5. Flexible media space 2
- 6. Fire lobby with main circulation core
- 7. External main entrance raised from street level
- 8. Storage facilities
- 9. Administration office
- 10. Discussion rooms (Single and group)
- 11. Interview rooms
- 12. Accessible toilet
- 13. Discussion forum with glazed records storage
- 14. Entrance to ground floor discussion forum chamber

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- 15. Staircase to main forum chamber-
- 16. Access from bell tower over to riverfront gardens
- 17. Parliament forum offices and check in desk
- 18. Fire escape stairs
- 19. Elevator access
- 20. Garden courtyard circulation
- 21. Representative public offices
- 22. Staircase up to first floor
- 23. St Enoch's healing well in central garden forum
- 24. Access opens in and out to main events forum
- 25. Temporary installation structure for events
- 26. Committee and community discussion forum
- 27. Small discussion rooms
- 28. Public gallery
- 29. Accessible toilets in circulation
- 30. Atrium space
- 31. Refreshments area (day and night)
- 32. Secondary circulation core
- 33. Entrance to auditorium
- 34. Entrance lobby with seating
- 35. Fire escape to outside
- 36. Coffee and projection booth
- 37. Cinema screen structure



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#### VISUALS + DETAIL DRAWINGS



**Entrance and reception** – Permanent stone gallery

**External colonnade** - circulation around public garden

### VISUALS + DETAIL DRAWINGS External façade detail: Drawn 1:10





### **SECTION BB** – Main auditorium and forum space





#### FIRST FLOOR PLAN Drawn at 1:100 A0

- 1. Fire lobby circulation core
- 2. Void over reception to gallery below
- 3. Upper stone gallery forum
- 4. External cinema media space
- 5. Green roof over entrance
- 6. Bell tower
- 7. Ground floor draught lobby roof
- 8. Old stone façade
- 9. Picture gallery observation deck
- 10. Temporary timber installation forum
- 11. Integrated bay window seating
- 12. Information desk
- 13. Discussion rooms
- 14. Staircase from ground floor chamber
- 15. Lecture education space
- 16. Elevator access
- 17. Fire escape stairs
- 18. Grand forum space
- 19. Main public forum chamber
- 20. Circulation to chamber public gallery
- 21. Circulation
- 22. Educational workshops woodwork, metal and stone
- 23. Preparation and cloakroom
- 24. Staircase from ground floor with observation deck to garden
- 25. Prep and clean up zone
- 26. Small private studio spaces
- 27. Public studio events forum culture and arts
- 28. External deck over commercial realm
- 29. Lecture rooms with raised seating and built in storage
- 30. I.T Facilities
- 31. Library facilities
- 32. Study rooms overlooking auditorium
- 33. Announcement deck over into atrium space
- 34. Accessible toilets
- 35. Secondary circulation core
- 36. Discussion/meeting rooms

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#### VISUALS + DETAIL DRAWINGS





GARDEN CIRCULATION SPACE – outside representative public offices and main chamber

**Representative window detail**: Drawn at 1:10







#### **UPPER FIRST FLOOR PLAN** Drawn at 1:100 A0

- 1. Fire escape rooftop access to community gardens
- 2. Elevator access to rooftop circulation deck
- 3. Community kitchen gathering space
- 4. Contemplation pod overlooking River
- 5. Small garden zone
- 6. Public gallery over main chamber
- 7. Staircase to public gallery window looking into workshops

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- 8. Workshops rooftop area beyond windows
- 9. Void above community studio forum
- 10. Outdoor cinema and social space
- 11. Refreshments counter
- 12. Bell tower elevator shaft to observation deck







1. Auditorium rooftop

**ROOF PLAN** 

Drawn at 1/100 A0

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- 2. Atrium space skylight
- 3. Elevator staircase top
- 4. Main forum space skylight
- 5. Main staircase rooftop
- 6. Stone gallery skylight
- 7. Bell tower observation deck
- 8. Discussion room hallway skylight
- 9. Fire escape rooftop access
- 10. Community garden rooftop access roof
- 11. Main chamber skylight
- 12. Workshop skylights
- 13. Staircase to main chamber observation deck
- 14. Community forum studio skylight
- 15. Workshop roofs
- 16. Western rooftops



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**3D Axonometric model** Exploded floor layout and context relation



