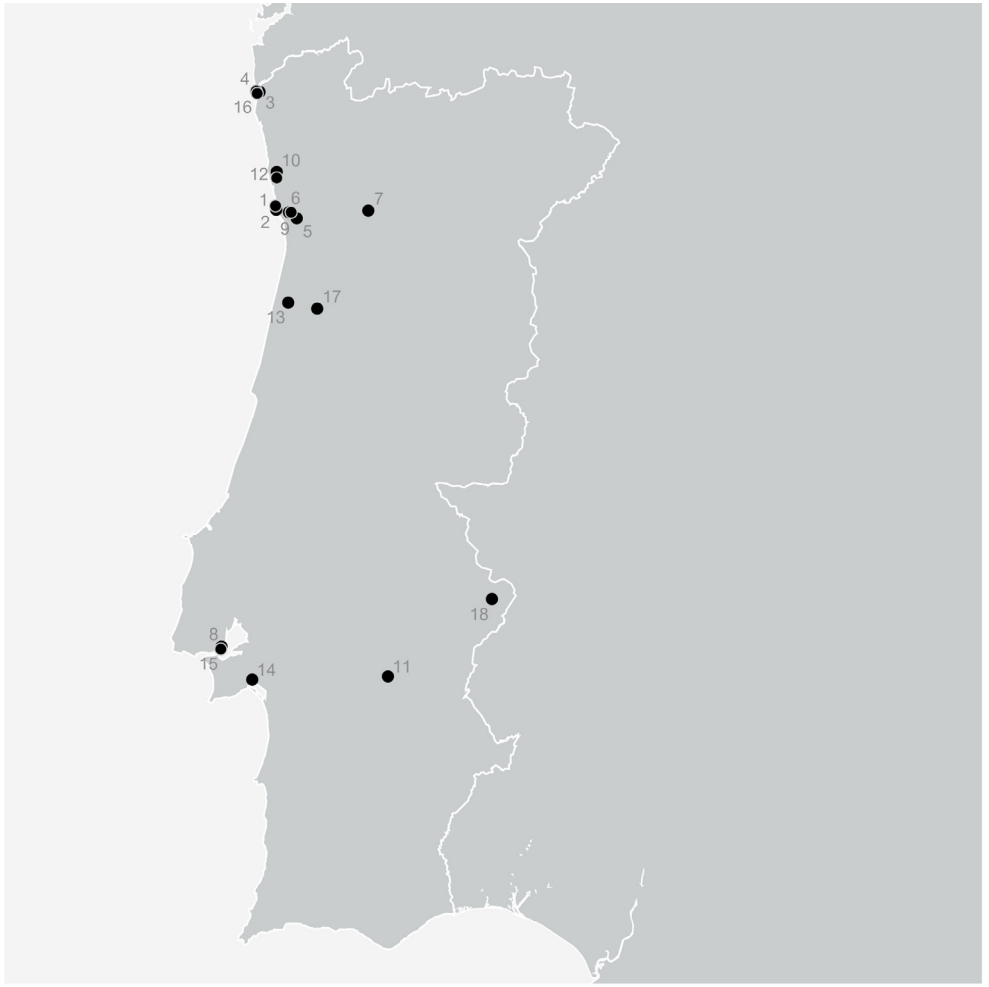
SIZATLAS

VIANA DO CASTELO PUBLIC LIBRARY



1 Boa Nova Tea House and Restaurant
2 Ocean Swimming Pool
3 Alves Costa House
4 Alcino Cardoso House
5 Bouça Housing Complex
6 Faculty of Architecture of the University of Porto
7 Santa Maria Church and Parish Centre
8 Portugal Pavilion, Expo'98
9 Serralves Museum of Contemporary Art
10 Beires House
11 Malagueira Neighbourhood
12 Borges & Irmão Bank
13 Avelino Duarte House
14 Setúbal School of Education
15 Reconstruction of the Chiado area
16 **Viana do Castelo Public Library**
17 Pinto & Sotto Mayor Bank
18 Adega Mayor

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INTRODUCTION

CONTEXT

Twentieth-century heritage is particularly vulnerable because of its formal and material solutions, but also due to the fact of having scarce recognition among the civil society and heritage safeguarding bodies. Considering this background, the ICOMOS study "The World Heritage list: filling the gaps – an action plan for the future" (ICOMOS, 2005) and the Global Strategy of the UNESCO World Heritage Committee (WHC) have encouraged State Parties to submit twentieth-century heritage nominations (UNESCO-WHC, 1994).

In this context, the ICOMOS-Portugal presented the "Ensemble of Álvaro Siza's Architecture Works in Portugal" to the World Heritage (WH) Tentative List, in 2017, later submitted to the WH List by the Faculty of Architecture of the University of Porto, in 2024, under the title "Álvaro Siza's Architecture: Modern Contextualism Legacy". This nomination proposal expresses Álvaro Siza's outstanding architecture spanning across the second half of the twentieth century, which testifies to the critical revision of the Modern Movement principles towards a more contextual and humanist approach. This modern contextualism is an exceptional legacy conveyed by Álvaro Siza's architectural works and his 'School', with major impact across different generations of architects, in distinct continents, addressing the needs and the aspirations of local populations. The component parts emerge as a result of the architecture development in the second half of the twentieth century, responding to the specific conditions of local contexts and producing alternative responses to the prevailing axioms of the international Modernism, while also contributing to the Postmodern debate. Siza is a worldwide recognized architect with approximately five hundred projects and built works spread across four continents and sixteen countries, and the subject of more than one hundred distinctions and awards, nineteen Honorary degrees, and hundreds of dedicated publications.

Despite international recognition of the quality of Siza's architecture, there is not yet a complete and systematic inventory and consistent documentation of his built works. The information is usually scattered, partial or incomplete. The existent literature focuses more on formal aspects of the designs, and little on the tectonics and material dimension of his works, including the building's state of conservation and the potential threats affecting them.

With this framework, the project 'SizaATLAS: Filling the gaps for World Heritage' (SizaATLAS) was submitted and funded by the Foundation for Science and Technology (FCT) between 2021 and 2024. This research project aims to address: i) a collaborative platform for interactive dissemination; ii) a comprehensive inventory of all of Siza's built works; iii) a detailed documentation of the 18 buildings selected for the WH Tentative List (which is the main focus of the present booklet); iv) Recommendations for the WH nomination; and v) Dissemination and knowledge transfer.

METHODOLOGY

The research methodology for the documentation booklets is supported by a cross-analysis of different methods and tools: i) archival and bibliographic research; ii) field work observation and surveys; iii) digital documentation such as photogrammetry, virtual tours through 360° photos, 3D BIM didactic model of representative constructive sections and details. This multi-method approach, combining traditional and digital techniques, aims at providing holistic, integrated and comprehensive documentation, providing accessible information for diverse audiences, ranging from specialists to the general public, and a robust framework for management and conservation informed by the attributes of Outstanding Universal Value (OUV) and Álvaro Siza's design principles.

i) Archival Research included the consultation of documentation held by the Serralves Foundation, the Calouste Gulbenkian Foundation, the Canadian Centre for Architecture, or Drawing Matter. In addition, municipal archives and libraries were also consulted to gather as much relevant information as possible. Research included textual and graphic documentation, such as licensing projects, written documents, technical drawings, sketches, photographs, models, and correspondence, Also, comprehensive literature was developed for each building documentation.

ii) Fieldwork encompassed a meticulous exploration of the building's spaces and discussions with staff members, which provided valuable context and enhanced comprehension of the buildings. To ensure a comprehensive documentation process, an extensive photographic survey was conducted, employing drones to capture both aerial perspectives and detailed captions of the sites. Furthermore, this process included an in-depth analysis of construction details, with a particular focus on tectonic features.

iii) The digital documentation protocol was thoughtfully devised to facilitate the systematic organization and seamless integration of all gathered data, culminating in the creation of a comprehensive and easily accessible archive for future reference. The methodology for digital documentation, framed within the SizaATLAS research project, employs combined techniques to document Álvaro Siza buildings, namely: a) photogrammetry, b) 360º virtual tours, and c) BIM didactic models.

BOOKLET STRUCTURE

The booklets are structured in 9 sections.

The INTRODUCTION provides the background, aims and methodology of the SizaATLAS documentation booklets.

The HISTORY AND DESCRIPTION section provides a general context of the building analysed in the booklet, including the following aspects: place and date of construction; landscape, natural features and preexistences; context of the building commission; design and construction phases; detailed description of the design process supported on archival resources; composition, volumetrics and geometry; programme and functional organization; promenade and light; tectonics and constructive detailing; Integrated artworks and furniture; awards and recognitions; recent interventions; international impact of the work.

As regards the section CONSTRUCTION, it aims at providing a tectonic perspective of the buildings through a representative section and details focusing on its Structural System, Walls, Roofs, and Frames.

The DESIGN PRINCIPLES aim to clarify Álvaro Siza's original design intent, being a permanent reference for the conservation of the building and an instrument to manage proposals for change. It should also be considered when establishing planning controls for the surrounding landscape, ensuring the preservation of visual relationships and future long-term improvements to the setting. To remain faithful and respectful of Siza's thoughts and design approach, these design principles are based on his own words, namely on a selection of 'aphorisms' collected from his texts, design reports, and interviews.

The ATTRIBUTES section relates to the specific and unique qualities expressed in the OUV for the WH nomination proposal "Álvaro Siza's Architecture: Modern Contextualism Legacy", namely: i) Architecture responsive to a physical, social and historical context; ii) Integration of international and local references; iii) Sculptural volumetric expression; iv) Oriented spatial experiences; v) Total work of art including details, furniture and art works.

STATE OF CONSERVATION is a description of the building's current condition and recent conservation or reuse interventions. In most cases, the buildings have been submitted to recent conservation interventions which adapted them to current legal, sanitary, accessibility or comfort standards.

DIGITAL DOCUMENTATION results from an integrated methodology combining: i) photogrammetry; ii) 360º virtual tours (available through QR Codes); and iii) BIM didactic models. These techniques are adapted to each building with some limitations related with the photogrammetry conditions (vegetation, surface colours, and others) or to the access to the buildings, which was authorized in public buildings, and restricted in private houses and bank agencies.

SOURCES AND BIBLIOGRAPHY refer to the archives and specific literature consulted for each building under analysis.

HISTORY AND DESCRIPTION

The Municipal Library of Viana do Castelo is situated on the strip of land between the Lima River and the city's riverside road. The commission dates from November 9, 2001, and it officially opened on January 20, 2008.

The building is a significant component of the city's Riverside Plan, devised by the architect Fernando Távora. Initial studies for the area began in 1999 and were retaken after the implementation of the Polis programme in 2002. The Plan also included the arrangement of the exterior spaces and the construction of a cultural center, designed by Eduardo Souto de Moura (Multipurpose Pavilion, 2013). In addition, two office buildings, also designed by Fernando Távora, frame the Liberdade Square and the 25 April monument.

The programme definition is based on the "Proposal of Services and Areas" and the "Recommendations" outlined by the Portuguese Book and Libraries Institute (IPLB) for the "National Network of Public Libraries", as well as certain guidelines presented by the Municipal Council and by the Polis programme.

Collaborators on the project included Edison Okumura, Maria Moita, Francisco Reina Guedes, Tatiana Berger, Verónica Martínez and José Manuel Pelegrín.

The placement of the building was agreed with Fernando Távora and the other designers, the architects Eduardo Souto de Moura, José Bernardo Távora and Adalberto Dias. As noted in the Design Report, the design benefited from a rewarding and open dialogue among architects, developers, and managers involved in the planning process. This collaborative approach fostered a conducive environment for exchange and cooperation, ultimately contributing to the realization of the design.

The proposed architectonic expression is primarily the result of several deliberate design decisions. Firstly, it focuses on maximizing the visibility of the river by raising the main volume of the library, supported by "L" shaped pillars, allowing for an unobstructed view across a significant portion of the building. Additionally, the design maintains orthogonality in both plan and elevation. Moreover, the predominance of long horizontal openings was complemented by skylights, protection from the sun and appropriate orientation. Exposed white concrete was used on the exterior surface, with stone cladding along the base of the building. Finally, the volumetric definition of the structure is achieved through a thoughtful dialogue between the surrounding landscape and the built form.

The building adheres strictly to orthogonality, both in its plan and elevation, aligning parallel to the margin of the Lima River, ensuring geometric coherence and structural integrity. On the eastern side of the library, walls extend the length of the building, establishing a parallel axis to the river. Furthermore, being raised from the ground not only optimizes views over the river but also preserves its connection with the cityscape. This strategic decision seamlessly maintains the building's relationship with the surrounding urban fabric, allowing for uninterrupted sightlines and visual continuity with the environment.

Inside, wide openings offer expansive views in the reading areas, while skylights of different shapes bring in indirect natural light is.

The chosen structural scheme involves a lattice grid of beams at the roof level, supporting zone 1 of the building. This grid transforms into two crossed metal beams at the first-floor level, forming two L-shaped configurations. One of the flaps of these L-shapes is strategically placed in the least obtrusive position, resulting in tensions on the outer side of this flap. This metal grid suspends the floor of the library, which comprises a mixed structure of steel beams with reinforced concrete blades on the upper and lower faces (with exposed concrete).

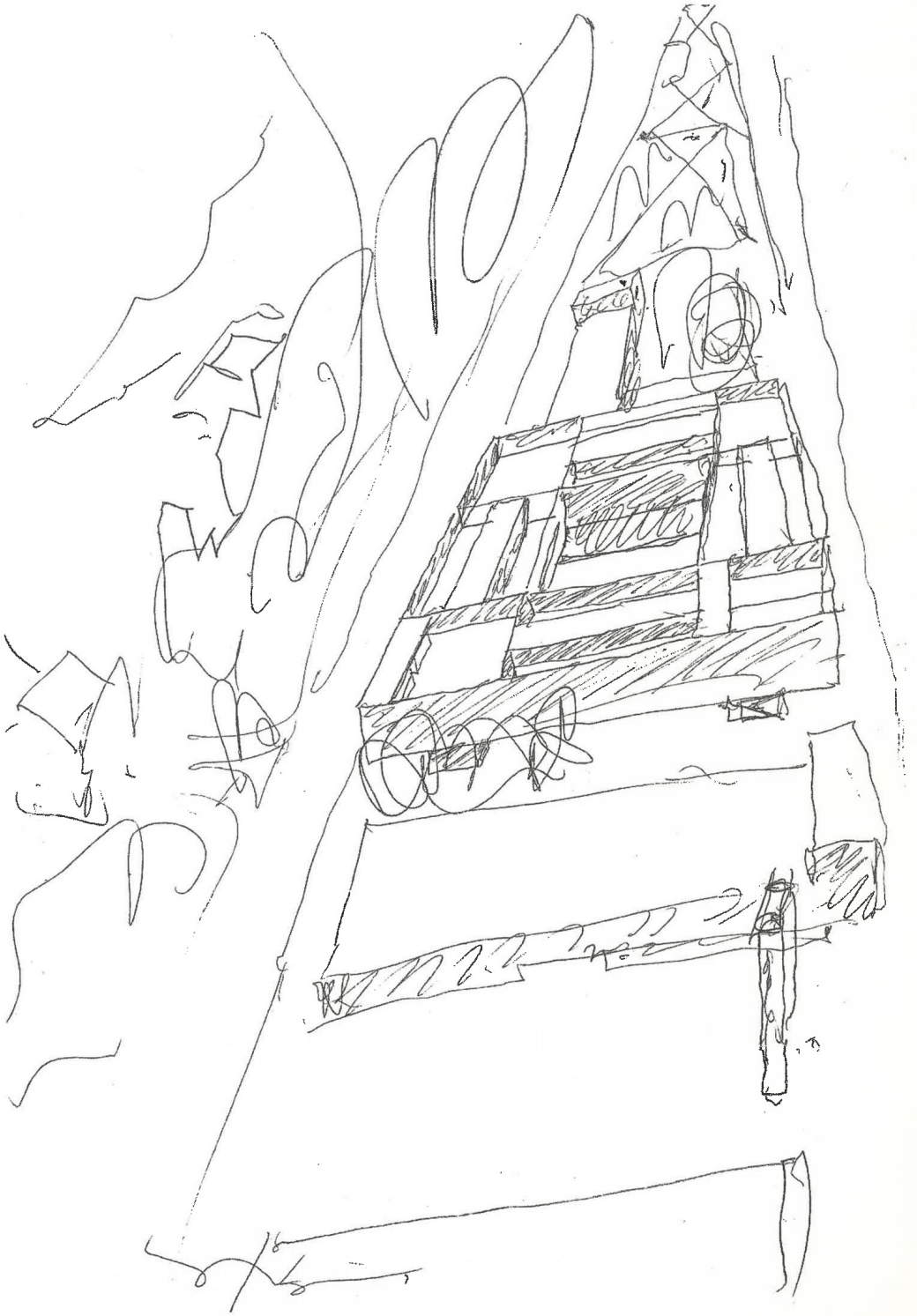
In terms of plastic expression, the building's design emphasizes the natural use of materials such as concrete, stone, or wood for the floors and library furniture.

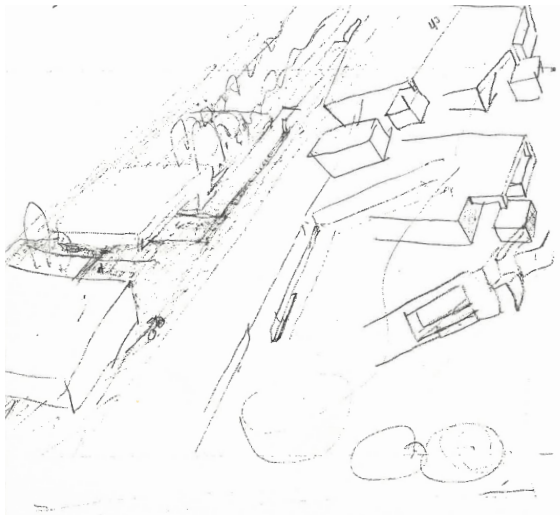
The interiors of the Municipal Library of Viana do Castelo are bright and pleasant, thanks to the careful arrangement of wooden floors and shelves, white surfaces, and framed views of the city and the river. Additionally, Siza designed the furniture for this project, including reading tables, chairs, service counters, and handrails, among other elements.

On November 12, 2008, the Municipal Library of Viana do Castelo was honoured with the 1st National Contemporary Architecture Award.

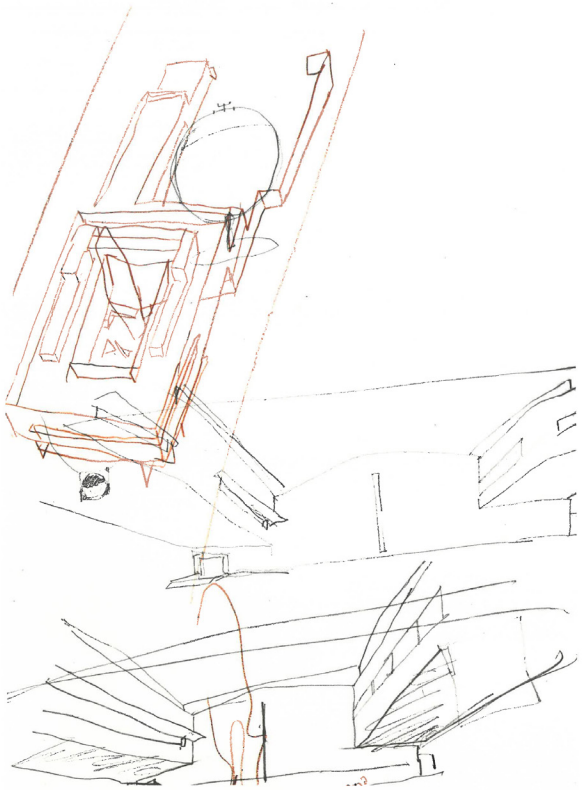
The Municipal Library of Viana do Castelo stands in good state of conservation, with all its elements and systems carefully maintained to a high standard.

The Municipal Library of Viana do Castelo has garnered widespread publication and acclaim, earning recognition as one of Álvaro Siza's most internationally impactful works of the 21st century.

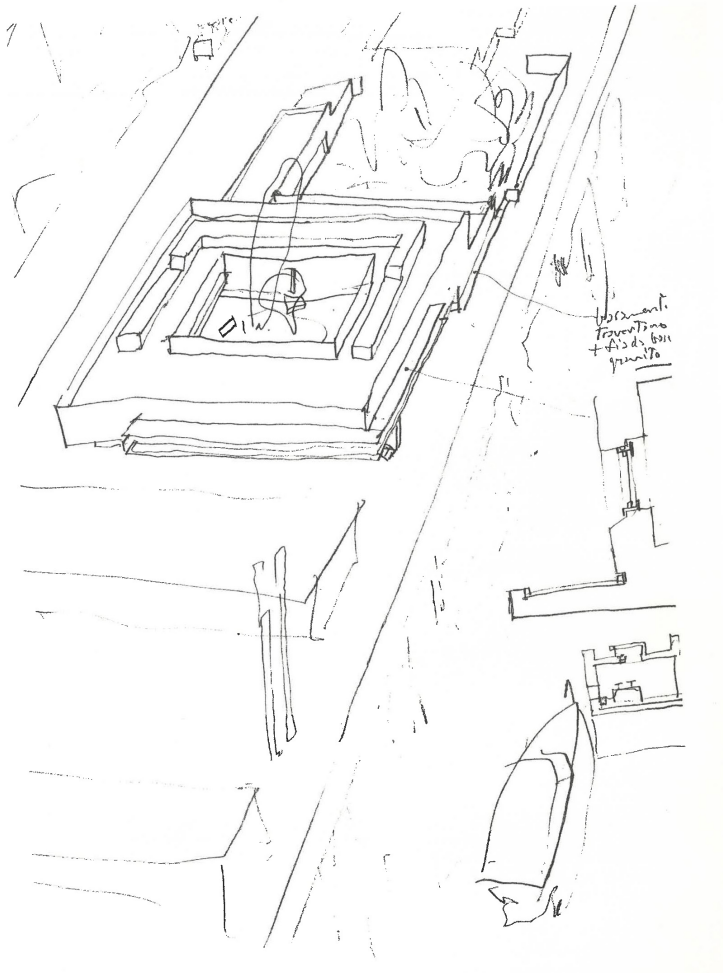




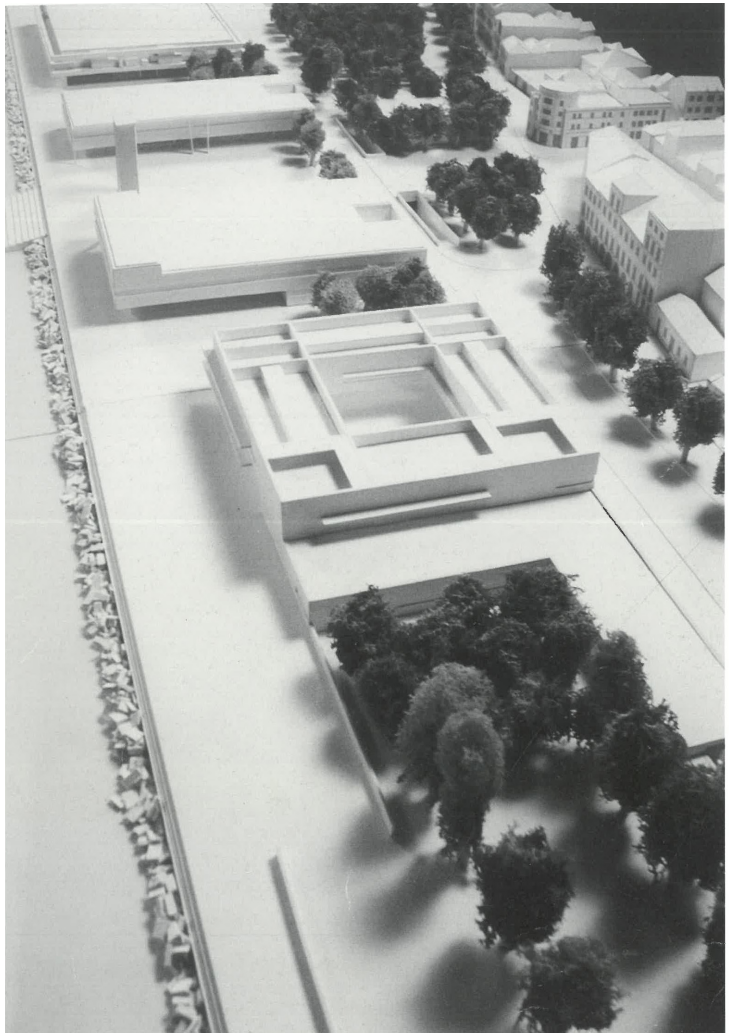
03. Preliminary studies.



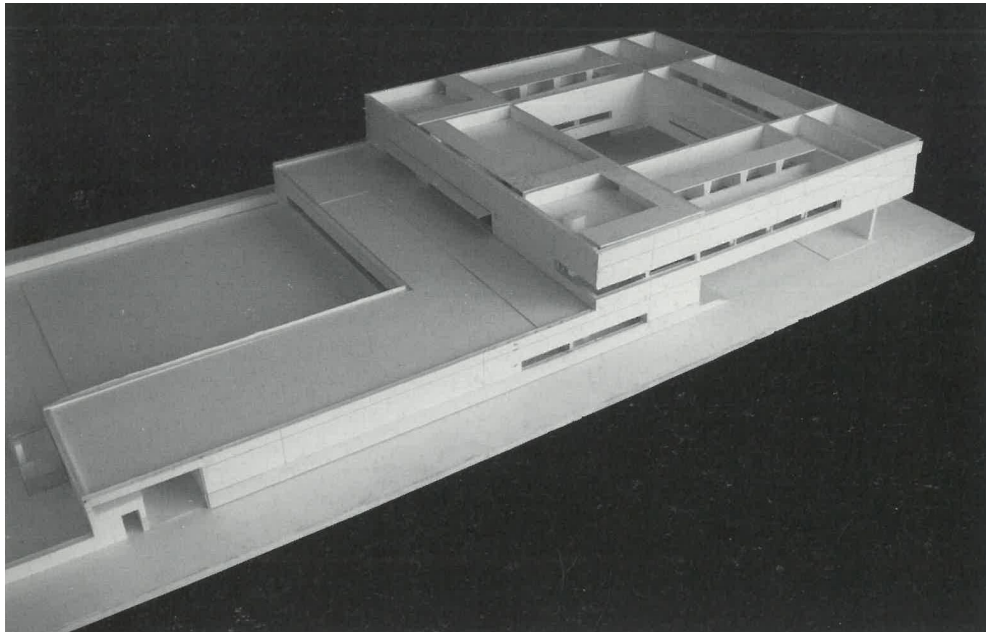
04. Studies for the entrance courtyard.



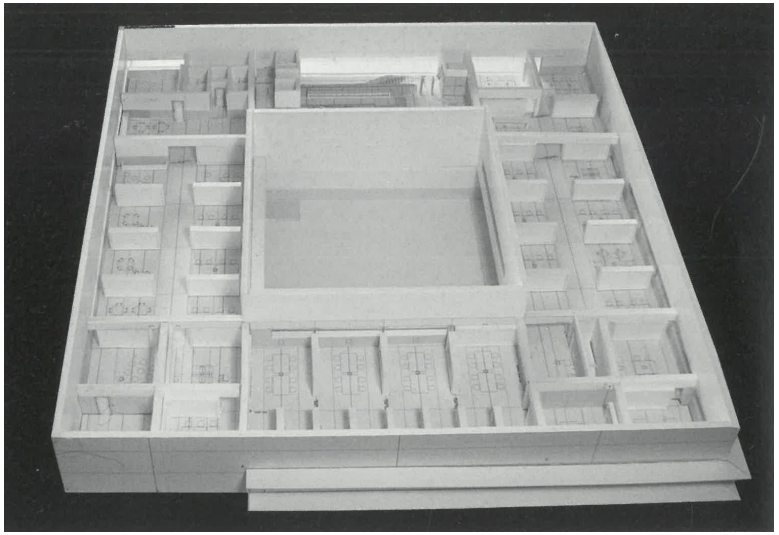
05. Volume composition studies.



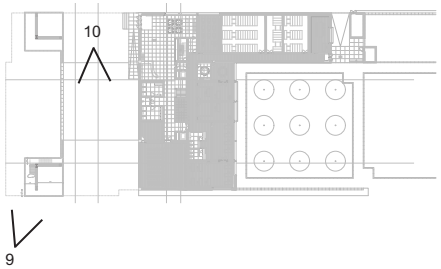
06. Relationship with the surrounding buildings.



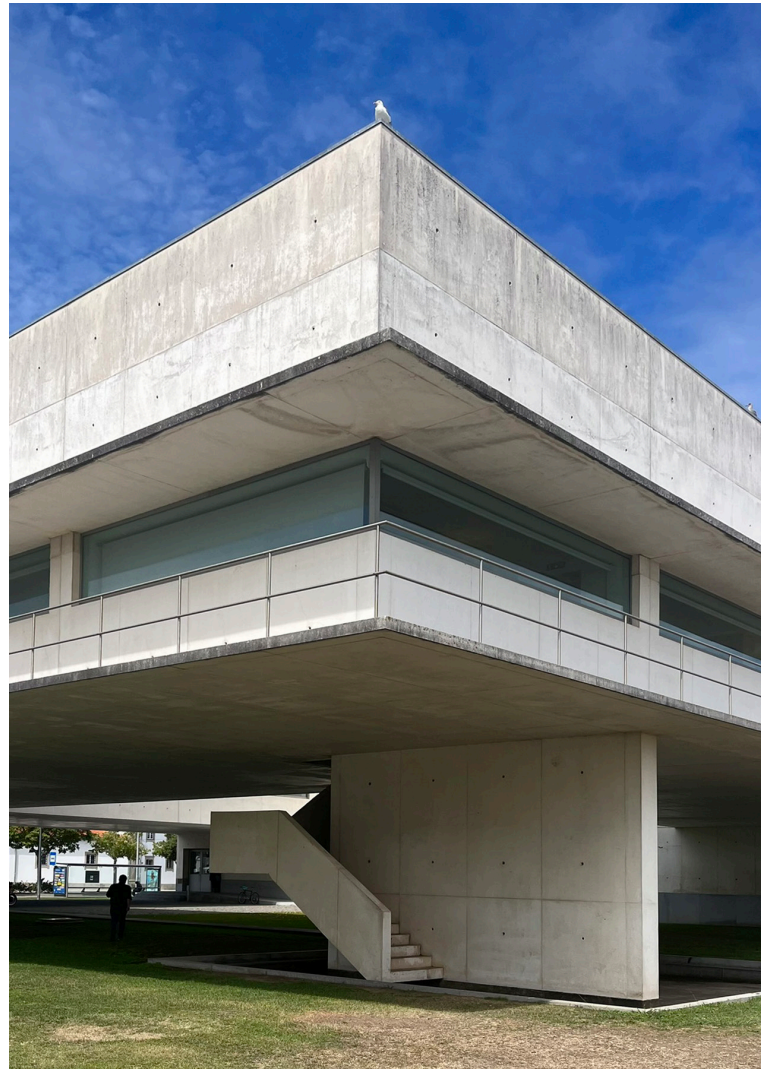
07. Volume composition.



08. Interior layout.

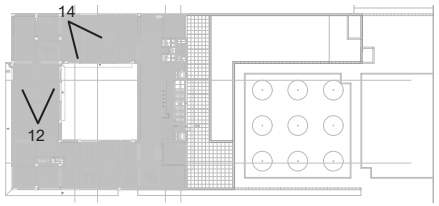


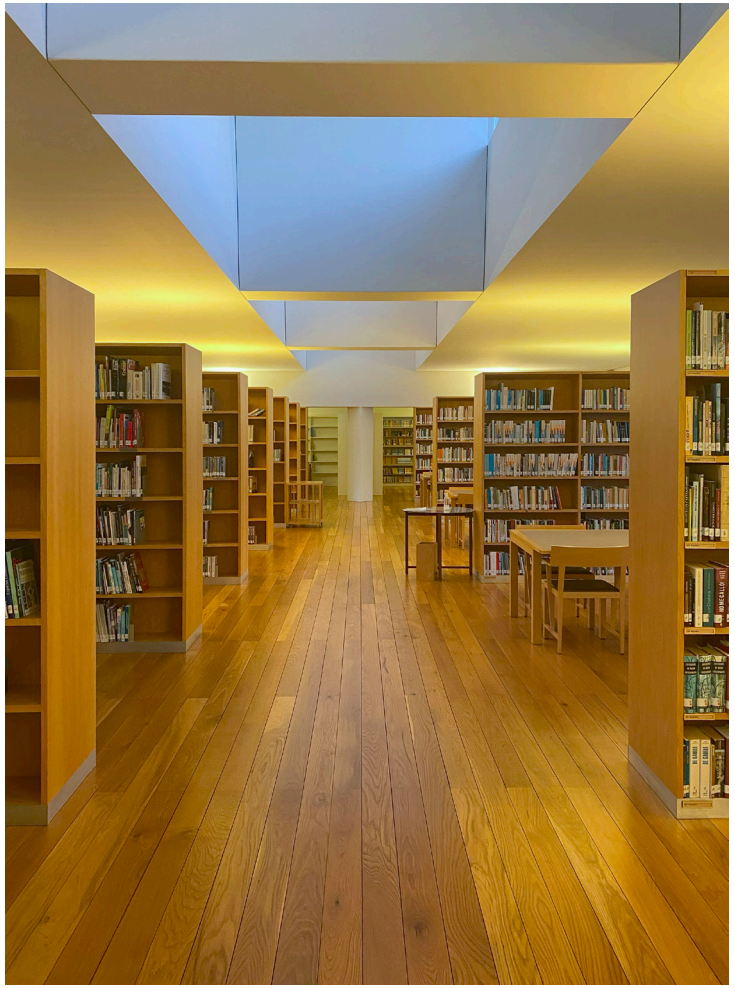
09. Southwest façade.



11. Southwest façade and staircase.

10. Entrance courtyard.

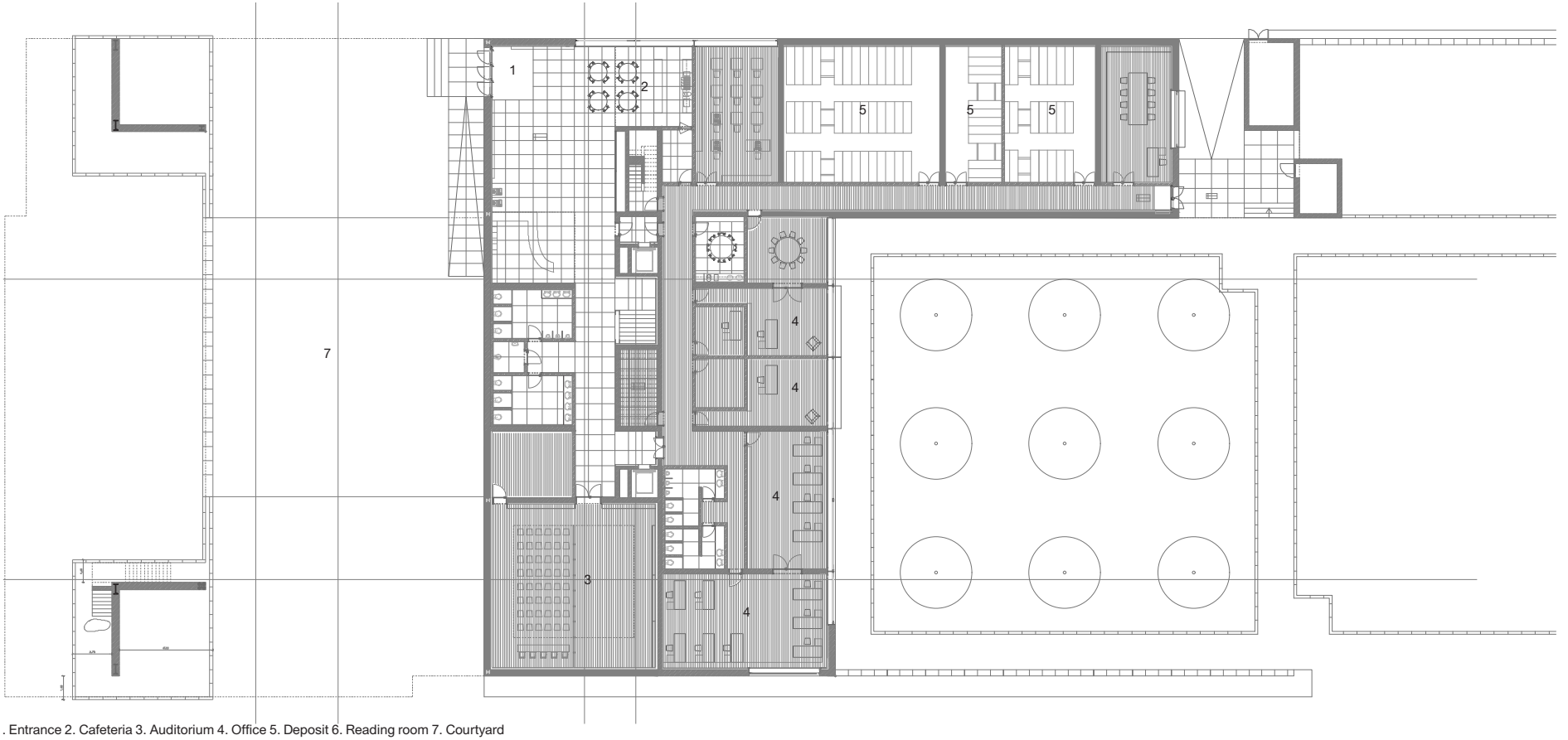




12. Reading room.

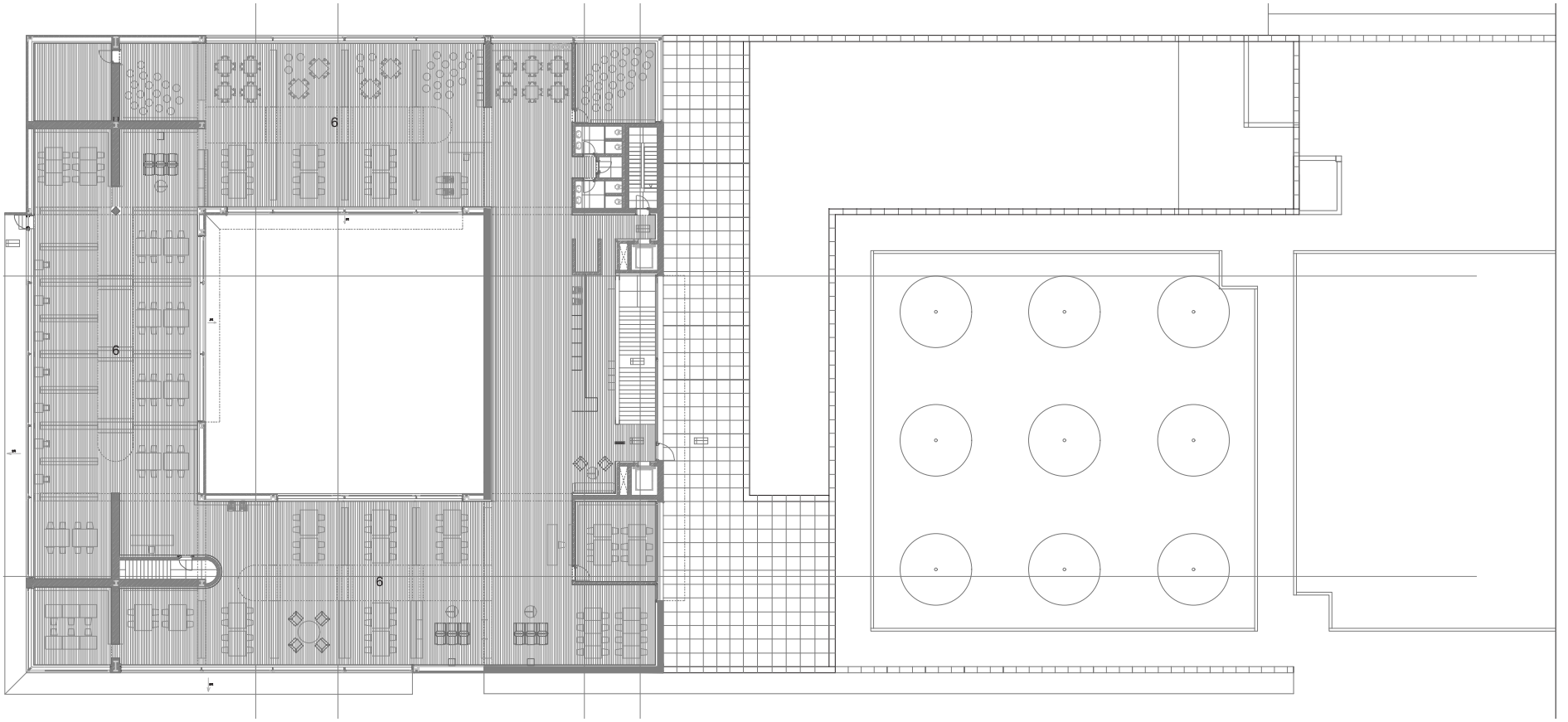
13. Reading room.

14. Children's area.



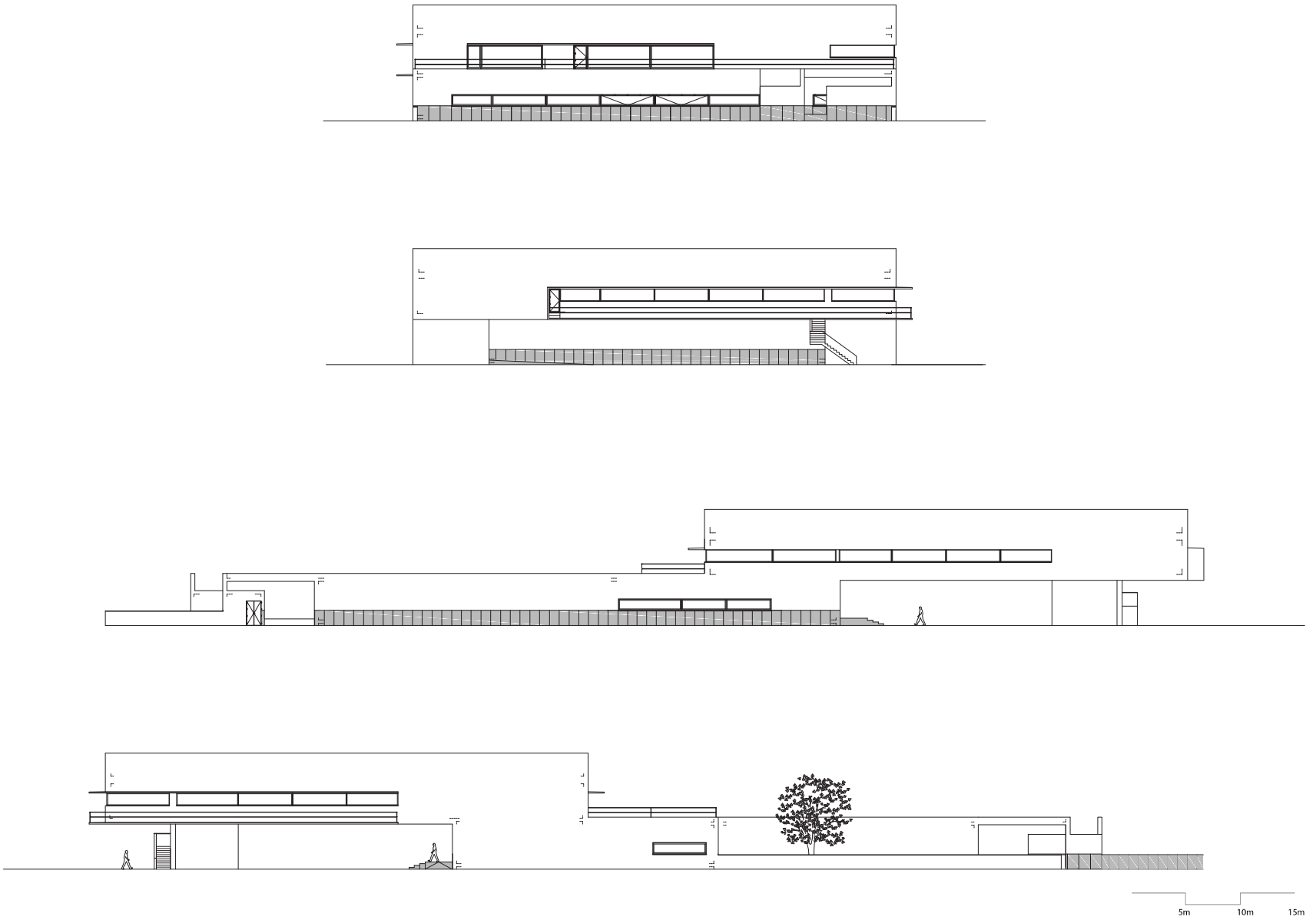
1. Entrance 2. Cafeteria 3. Auditorium 4. Office 5. Deposit 6. Reading room 7. Courtyard

15. Ground floor plan.

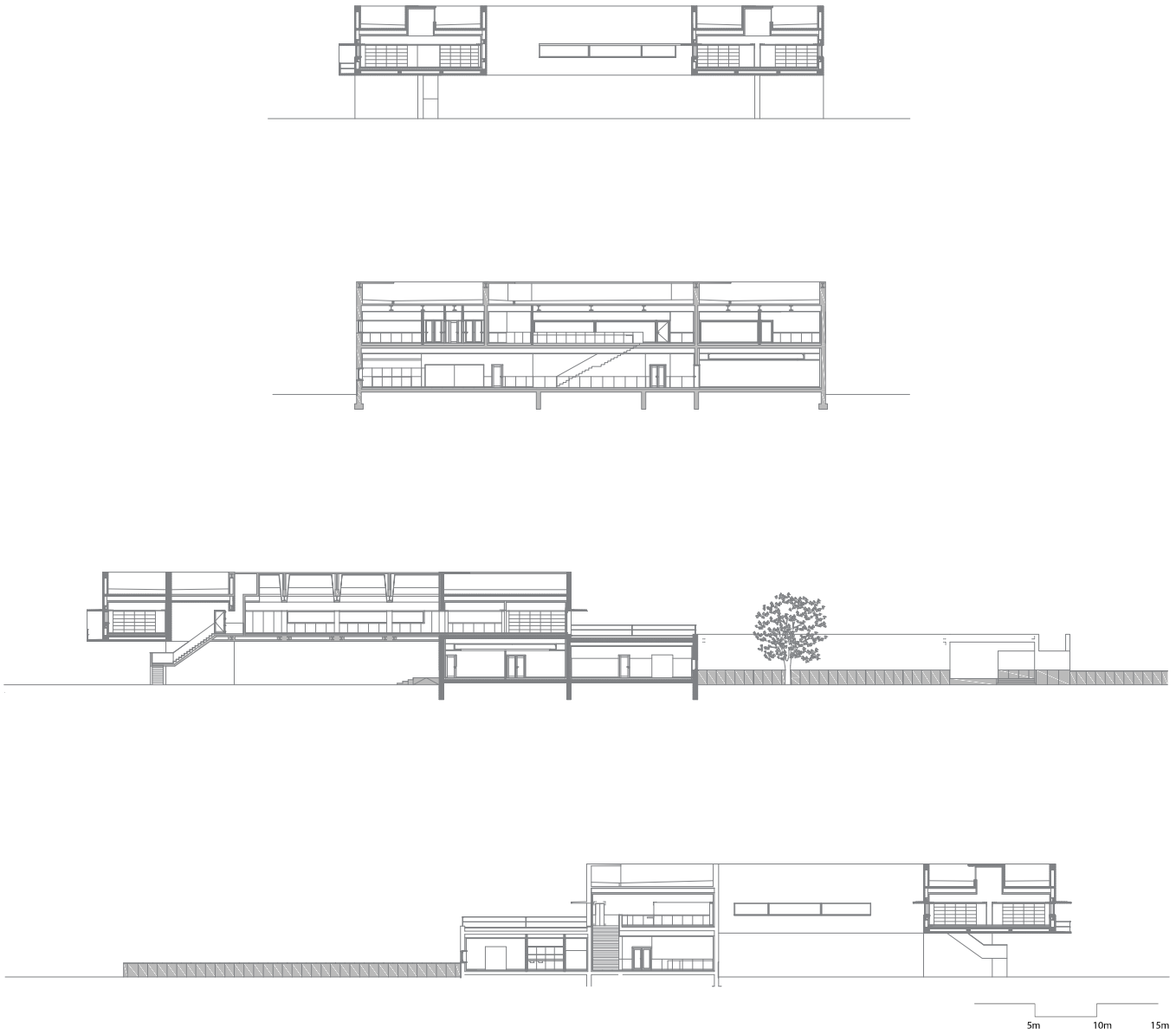


1. Entrance 2. Cafeteria 3. Auditorium 4. Office 5. Deposit 6. Reading room 7. Courtyard

16. First floor plan.



17. Elevations.



18. Sections.

CONSTRUCTION

STRUCTURAL SYSTEM

The structural system of the Municipal Library of Viana do Castelo is a mixed system, with metal and white reinforced concrete elements.

The vertical structure consists of solid reinforced concrete walls on the ground floor and "a metal framework of trusses that form a grid supporting the roof directly and, by suspension, the library floor" (GOP, 2002: 129).

The horizontal structure comprises composite steel and concrete slabs, pre-stressed, designed to span considerable distances. The metal surfaces of both structures, which do not come into direct contact with the concrete, are protected with fire-resistant paint.

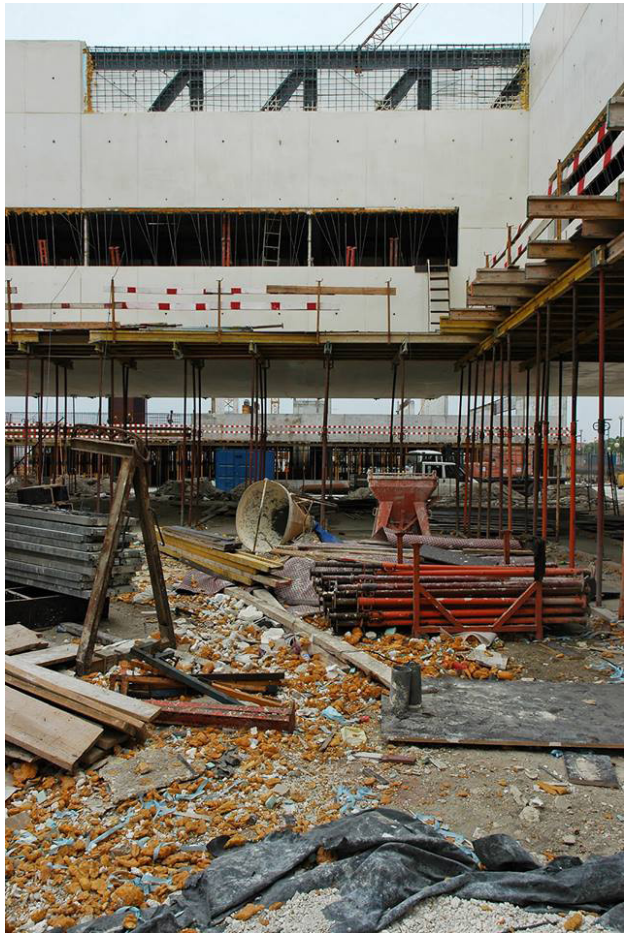
WALLS

The elevated floor's metal trusses are clad with exposed white concrete, which constitutes the exterior walls' finish. Special attention was given to the design of the formwork for this feature. Only the solid white reinforced concrete walls on the first floor have a base of 'Évora' grey granite cladding. All exposed concrete walls are treated with a suitable product to enhance their waterproofing and durability.

Internally, these walls are covered with 4cm thick sprayed polyurethane thermal insulation and drywall with a painted finish on the interior.

The balconies feature guardrails made of stainless steel tubes.

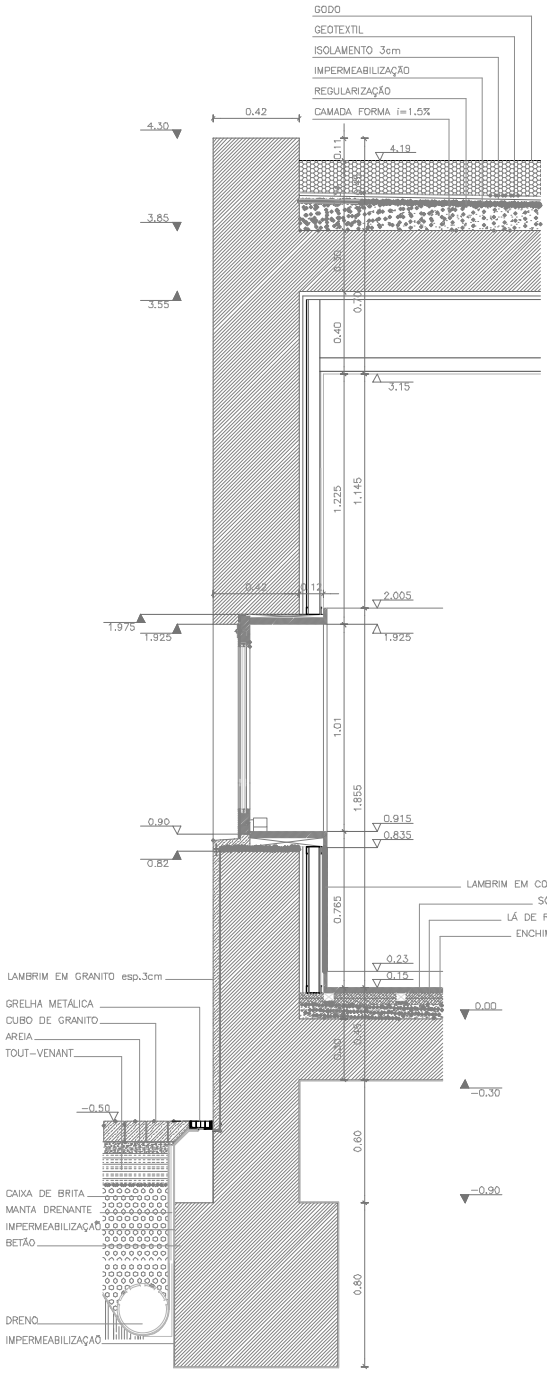
Interior partition walls consist of hollow brick masonry in thicknesses of 7, 11, and 15cm, with prefabricated lightly reinforced concrete lintels over the openings. All these walls are plastered with a stucco and painted finish or covered with drywall. In both cases, they include skirting boards made of 'Alicante Creme Marfil' marble or painted plywood.



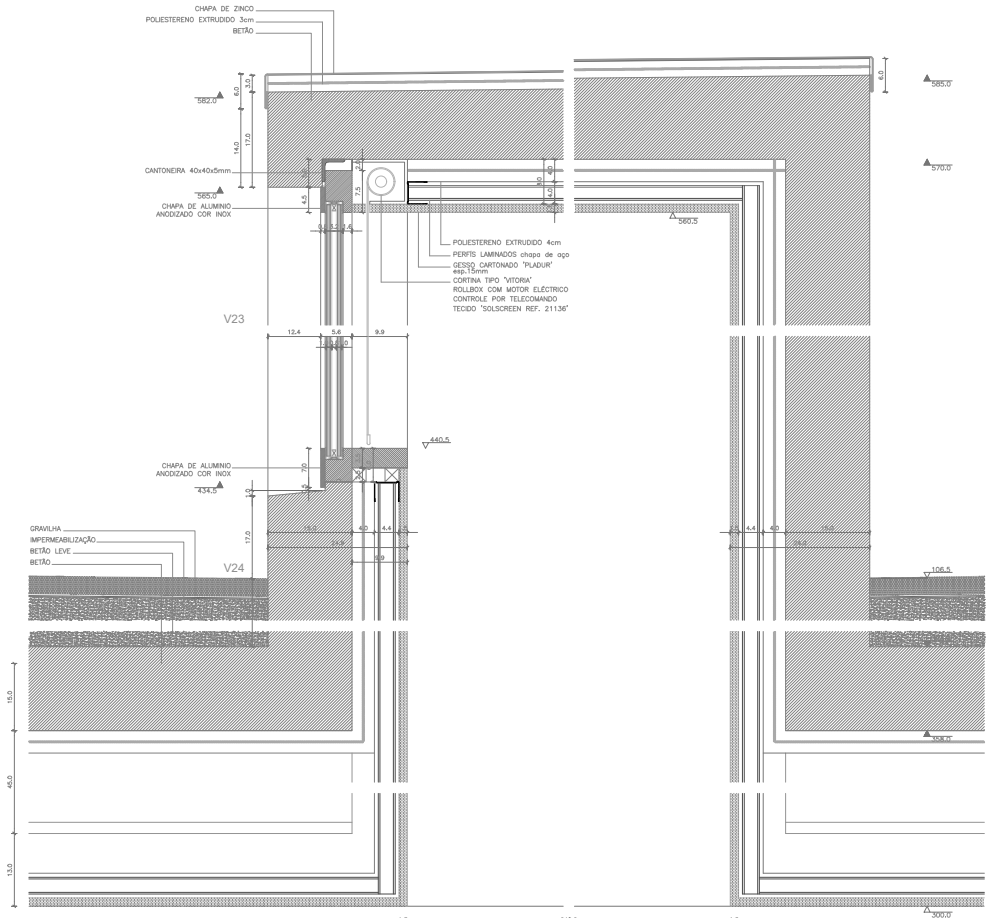
19. Exterior during construction works.

20. Structural system detail.

21. Interior during construction works.



22. Detailed section.



23. Skylight detail.

FLOORS

All interior floors of the library are covered with American Oak boards, except for the reception, cafeteria, toilets, stairs leading to the upper floor, and circulation areas, which are covered with 'Alicante Cream Marfil' marble. Additionally, deposit areas are covered with linoleum, and technical areas are painted with epoxy.

The wooden flooring is installed on a wooden battens framework, placed over a leveling screed and a cellular concrete infill layer, which is 7cm thick. Rockwool panels, 4cm thick, are laid over a rock wool mat for acoustic insulation.

The 'Alicante Cream Marfil' marble slabs are laid directly on the leveling screed, which is hydrophobic in wet areas, and subsequently on the cellular concrete infill, which is 10.5cm thick, in this case. The same applies to the epoxy-painted and linoleum-covered floors, but in these cases, the cellular concrete infill is 11cm thick.

The interior ceilings are predominantly suspended, constructed using a drywall system, including cornices, with a painted finish. .

ROOFS

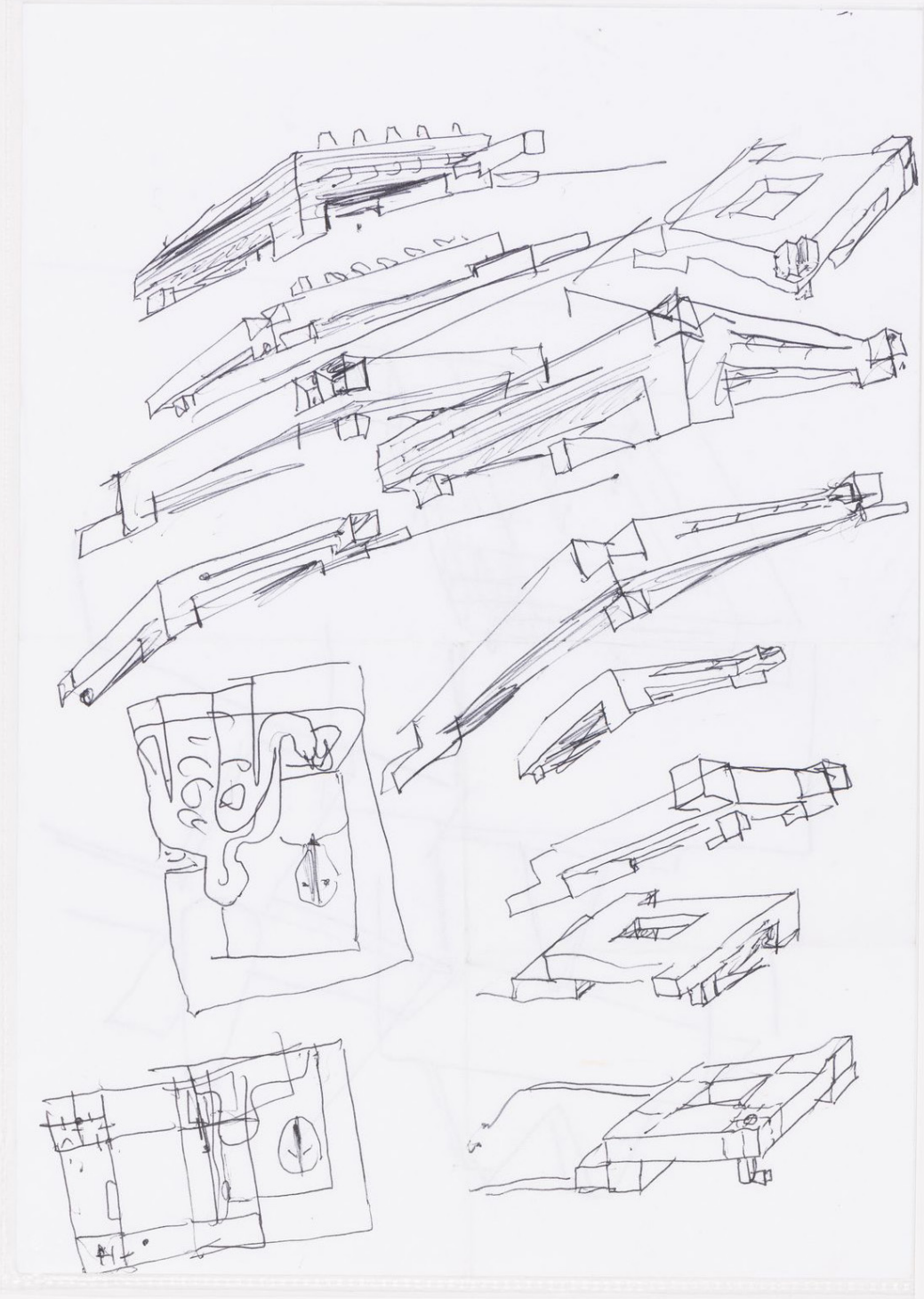
The roofs of the building are waterproofed with plastified PVC membranes, in-between geotextile layers, applied over a leveling screed and the necessary slope-forming layer of cellular concrete. A layer of pebbles, with a maximum thickness of 10cm, was applied to protect this system.

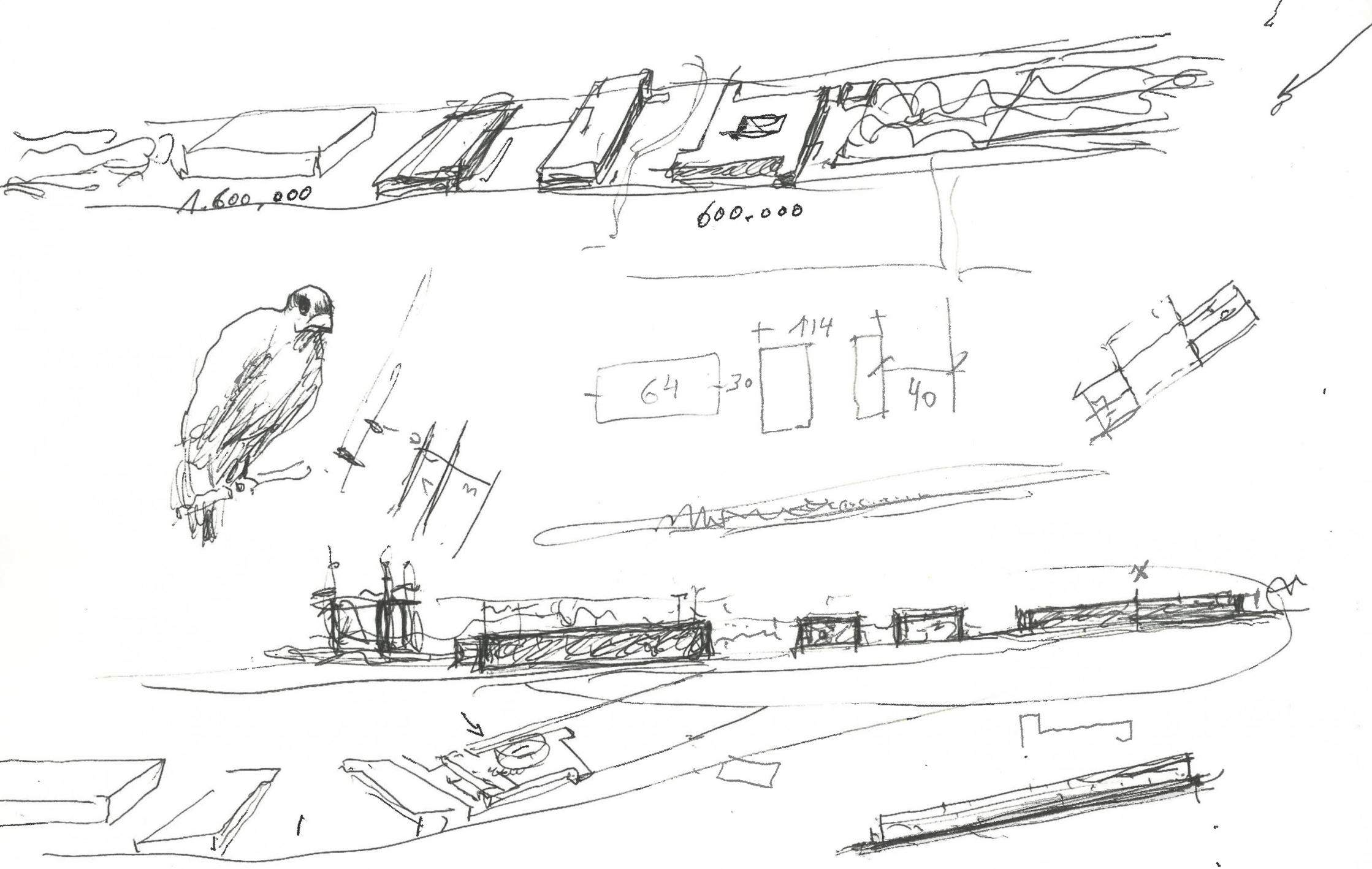
The parapets are clad with zinc flashing, applied over a separator membrane of the 'Delta Drain' type and plywood, with a slope directed towards the interior. .

OPENINGS

The external doors and windows are made from solid Kambala Iroko wood, with an enamel paint finish on the interior and anodized aluminum bars in a stainless steel color on the exterior. The glazing consists of double laminated glass with thicknesses of 10+10+8 and 10+8+10, with the intermediate layer being the air gap.

There are two types of internal doors: opaque and glazed. Opaque doors are made of Okoumé plywood, with frames, jambs, and trim in solid Kambala Iroko wood, all finished with enamel paint. Glazed doors have the same wood frames, jambs, and trim, also finished with enamel paint, and laminated glass, 0.12cm thick.

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DESIGN PRINCIPLES

DIALOGUE BETWEEN THE GARDEN AND THE BUILDING

Volumetric definition deliberately conditioned by the dialogue between the garden and the building. (Siza, 2005)

ORTHOGONALITY IN PLAN AND ELEVATION

Orthogonality in plan and elevation. (Siza, 2005)

HAVING A LARGE OPEN SPACE

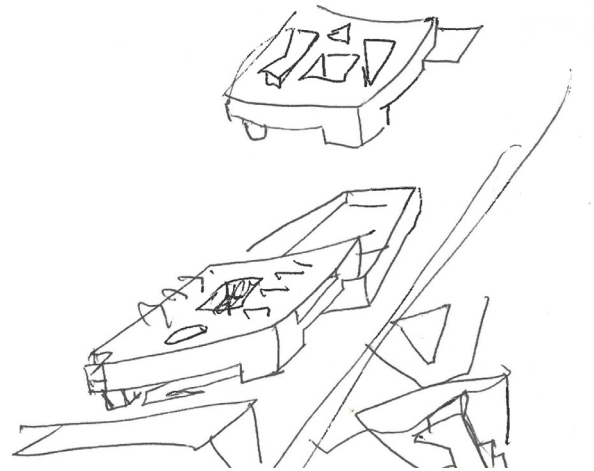
The design evolved towards having a large open space, created with just two supports and the support of the building itself, for transparency and other reasons, with an open space in the middle, that square. (Siza, , p. 133)

VIEWS OF THE RIVER ACHIEVED BY ELEVATING MOST OF THE FLOOR AREA

Views of the river Lima through a substantial area of the building. This is achieved by elevating most of the floor area, supporting it at the western end with two L-shaped piers, and at the eastern end by the construction of the ground-floor volume. (Siza, 2005)

PREDOMINANCE OF HORIZONTAL OPENINGS

The predominance of horizontal openings, complemented by skylights. (Siza, 2005)



ATTRIBUTES

ARCHITECTURE RESPONSIVE TO A PHYSICAL, SOCIAL AND HISTORICAL CONTEXT

The building is part of a renovation project, which guarantees an overall reading and an appropriate relationship between the natural and the built. The height of the building does not exceed that of the historic centre, blending the new with the old without altering the urban profile perceived from the other side of the river. Volumetric definition is based on a dialogue between landscape and built form. In addition, the building is largely lifted from the ground, not overwhelming the existing nearby architecture.

INTEGRATION OF INTERNATIONAL AND LOCAL REFERENCES

In the Municipal Library of Viana do Castelo were identified references to modern Brazilian architecture, in particular to the "Paulista school" of Vilanova Artigas.

SCULPTURAL VOLUMETRIC EXPRESSION

Due to its horizontality and the way it is raised from the ground, the building appears light despite its monolithic presence. On the outside of the building, to the west, two water mirrors surround the two pillars. In one of them, an attached emergency staircase ends in the water.

ORIENTED SPATIAL EXPERIENCES

Elevation of most of the floor area. The building does not create a wall between the town and the water, allowing the physical and visual relationship. In addition, the wide horizontal openings provide large, unobstructed views in the reading areas.

TOTAL WORK OF ART INCLUDING DETAILS, FURNITURE AND ARTWORKS

Interiors are bright and agreeable, as a result of the attention paid to the articulation of wooden floors and shelves, white surfaces and framed views from the city and the river. For this project, Siza also designed the furniture, including reading tables, chairs, service counters, and handrails, among others.

AUTHENTICITY AND INTEGRITY

AUTHENTICITY

The building is fully consistent with the original design and remains remarkably unchanged since its construction.

The Municipal Library of Viana do Castelo maintains the original materials and substance. No changes have been made since its construction.

The Municipal Library of Viana do Castelo maintains its original use and function, fully accomplishing the library function for which it was built.

After the conclusion of the library in 2008, the Cultural Centre of Viana do Castelo, designed by the architect Eduardo Souto de Moura, was inaugurated in 2013, completing the plan conceived for this city area, next to river Lima. The urban setting of the Municipal Library in Viana do Castelo is unchanged since the construction of the infrastructures planned for the site.

The Municipal Library in Viana do Castelo has maintained its character, contributing to the preservation of the conditions of authenticity of the area where it is located. The building, being elevated, allows communication and visual contact between the alameda 5 de outubro and the Viana do Castelo maintenance circuit. It is fully integrated into the daily life of the place.

INTEGRITY

The Municipal Library in Viana do Castelo is part of a renovation project, which guarantees an overall reading and an appropriate relationship between the natural and the built. Besides that, the building hasn't received any change since its construction and doesn't suffer from adverse effects of development or neglect. It fulfils the conditions of integrity and has all elements necessary to express Outstanding Universal Value.

The area of building is of an adequate scope for presenting the attributes and the cultural significance of the whole.

STATE OF CONSERVATION

The Municipal Library of Viana do Castelo is in a very good state of conservation. It has undergone systematic conservation and maintenace works, ensuring the best stability and safety conditions for its users. Remarkably, no structural repairs were necessary, attesting to the high-quality of the original construction.

Given its landscape setting, the natural degradation and weathering of theMunicipal Library of Viana do Castelo's fabric and material components are normal, requiring localized maintenance of its elements.

DIGITAL DOCUMENTATION

The digital revolution significantly impacts Cultural Heritage safeguarding offering advanced documentation and communication techniques. Modern heritage presents a rich opportunity for study and interpretation due to its diverse documentary, physical, and oral resources.

The methodology for digital documentation, framed within the SizaATLAS research project, employs combined techniques to document Álvaro Siza buildings, namely i) photogrammetry, ii) 360º virtual tours, and iii) BIM didactic models.

The development process involves is supported on previpus analysis of archival and bibliographc documentation and field work observation. This integrated metholodology provides holistic and in-depht analysis of the architectural works, expressing their design principles and OUV attributes, spanning form the relation with the context, the local and international references, the oriented spatial experiences, the volumetric expression and multiscalar approach, including construction and details. Also, it aims at info-accessibility and didactic dissemination of Siza's Architecture, allowing for interactive experiences to users all over the word.

PHOTOGRAMMETRY

Photogrammetry facilitates the three-dimensional representation of Siza's architectural works, interactively elucidating their relationships with the context and its volumetric dimensions. When combined with Building Information Modeling (BIM) and other digital tools, it establishes a robust documentation system.

In the last decade, photogrammetry has evolved as a crucial tool for the 3D documentation of cultural heritage, using various types of photos from both the ground and the air. Digital photogrammetry stands apart from traditional methods by employing digital images and computer systems, such as cameras, computers, and specialized software. With computer vision and automated processes, it is now possible to document very complex objects accurately and reconstruct the three-dimensional model with remarkable precision.

Utilizing drone photography from both DGI Air 2 and DGI Mavick Pro, alongside Map Pilot Pro software, comprehensive volumetric data was captured, providing insights into the buildings' integration with their context. This method not only captured the buildings' physical dimensions but also their visual impact on the surrounding landscape. Terrestrial photogrammetry further refined the models' accuracy, supported by Agisoft Metashape software for georeferencing. Employing a BIM approach ensured data interoperability and facilitated the creation of didactic models.

360º VIRTUAL TOURS

Virtual tours are an increasing instrumental in the documentation and preservation of cultural heritage, contributing communication, and conservation monitoring.

The development of the 360º virtual tours captions was guided both by the OUV attributes and the design principles of each building.

Images for these tours were acquired by a Ricoh Theta camera, ensuring precise timing and favorable weather and light conditions. Subsequently, the virtual tours were processed and enabled using software developed by detalhar.pt. The QR codes in the booklet allow for interactive virtual tour experiences of the buildings, focusing on the main attributes and design principles.

DIDACTIC MODELS

BIM didactic models have as their main objective to conduct a thorough tectonic perspective of a representative section of the building, namely on its construction and material features. Also, by comparing diverse solutions proposed for different buildings within the SizaATLAS research project, the models enable a holistic evaluation of Siza's architectural achievements, emphasizing the integration of form, function and construction.

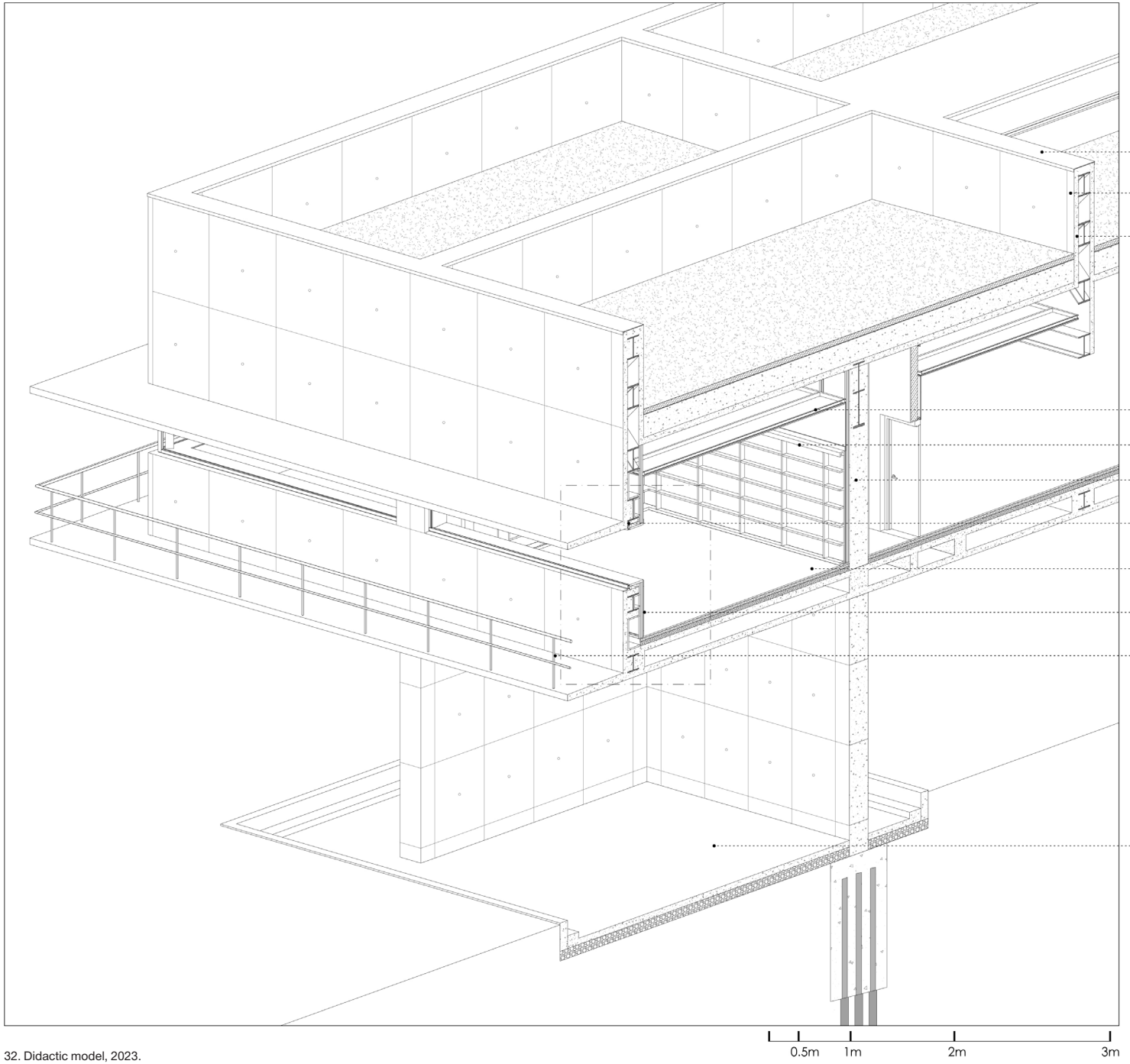
Drawing representation takes inspiration from Edward Ford's "The Details of Modern Architecture" these models prioritize clear language to disseminate knowledge effectively. The development process of the models involves cross-referencing analysis between archives and bibliography research combined with field work observation.

The Didactic Models offer an integrated approach to examining the architectural tectonics of Siza's designs. Hence, they meticulously detail material layers and construction methodologies, encompassing structural system, walls, roofs, frames and the respective intricate details.

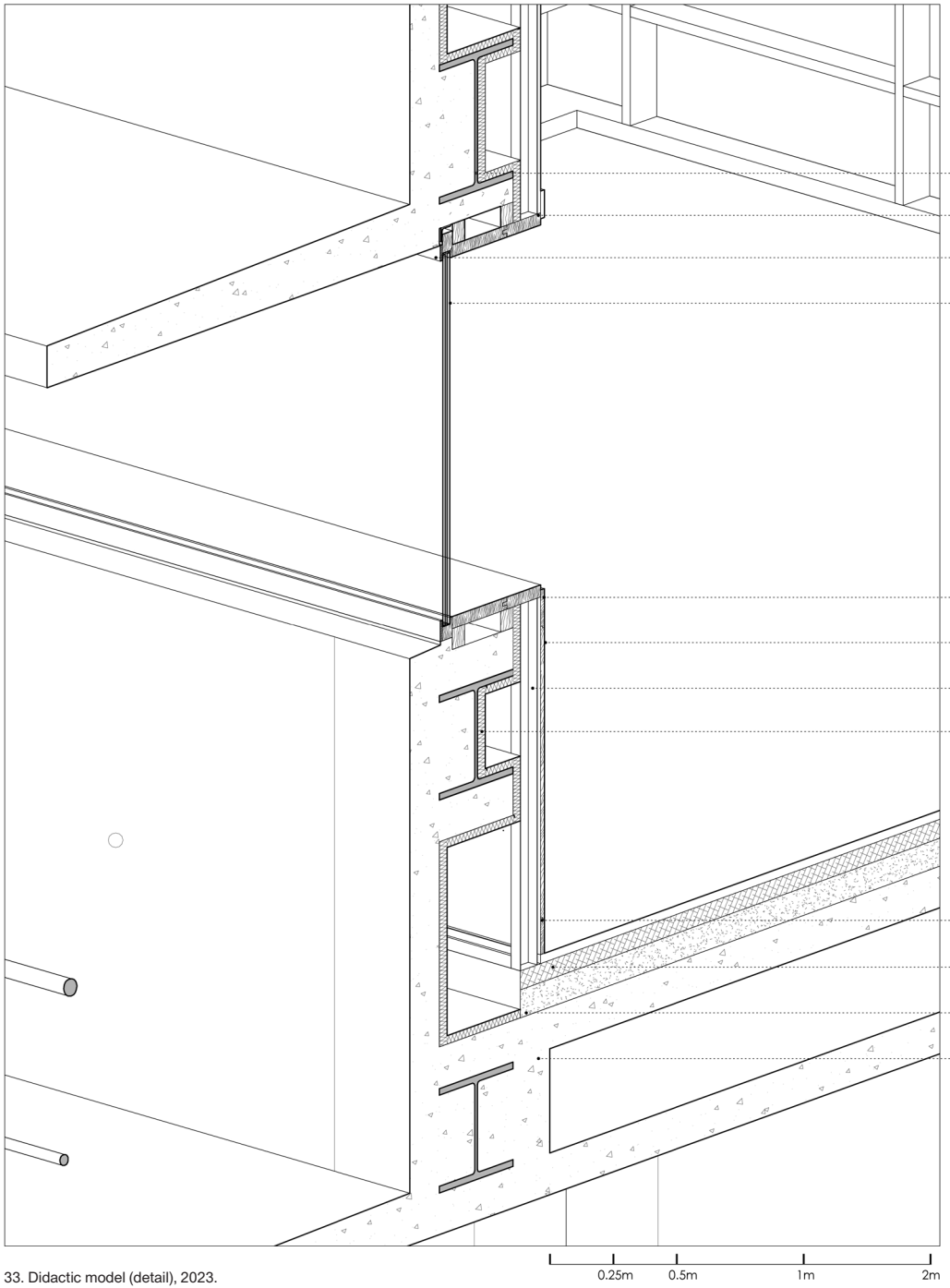
29. 30. Photogrammetry.

31. 360º Virtual Tour.

Virtual Tour



32. Didactic model, 2023.



33. Didactic model (detail), 2023.

SOURCES AND BIBLIOGRAPHY

AAVV (2002). “Álvaro Siza. Biblioteca municipale Viana do Castelo 2001”. In *Casabella*, n.º 700, p. 53.

Alho, C. (dir.) (2016). “Biblioteca de Viana do Castelo, Viana do Castelo”. In *ArchiNews*, n.º 38. Álvaro Siza. Projectos recentes/ Recent projects. Lisboa: Archi&Book’s, pp. 94-103.

Castanheira, C. (ed.) (2009). “Viana do Castelo Municipal Library”. In *Álvaro Siza: The Function of Beauty*. London: Phaidon Press, pp. 132-147.

Castanheira, C. (ed.) (2005). *Álvaro Siza: vinte e dois projectos recentes*. Casa da Arquitetura ed. Vila Nova de Gaia: Norprint.

Cecilia, F.M. and Levene, R.C. (eds.) (2000). *Alvaro Siza: 1958-2000*. Madrid: El Croquis.

Fernández-Galiano, L. (dir.) (2016). “Biblioteca municipal, 2001-2007, Viana do Castelo (Portugal)”. In *AV Monografías,* n.º 186-187. Álvaro Siza 1995-2016. Madrid: Arquitectura Viva SL, pp. 78-85.

Jodidio, P., Brigitta, K and Jacques B. (2013). “Viana do Castelo Public Library. Viana do Castelo, Portugal, 2000-2008”. In *Álvaro Siza: Complete Works 1952-2013*. Köln: Taschen, pp. 336-349.

Moura, E.S. *et al*. (2005). “Álvaro Siza Vieira. Biblioteca de Viana do Castelo”. In *Des-continuidade*. Barcelos: Livraria Civilização Editora, pp. 164-167.

Reis, M.M. and Santos, P. (coord.) (2013). “Biblioteca Municipal de Viana do Castelo”. In *Porto Poetic*. Porto: Ordem dos Arquitectos - Secção Regional do Norte, pp. 48-51.

Sequeira, M.; Melo, M. and Toussaint, M. (2017). “Biblioteca Municipal de Viana do Castelo/ Viana do Castelo Public Library”. In *Guia de Arquitectura. Álvaro Siza Projetos Construídos. Portugal*. Lisboa: A+A Books, pp. 44-45.

Tostões, A. (2008). *Arquitectura Portuguesa Contemporânea*. Lisboa: CTT. Edição do Clube do Coleccionador.

01. Ricardo Dias, 2022.
02. Álvaro Siza Archive.
Castanheira, C. (2007) Álvaro
Siza: vinte e dois projectos recen-tes. V. N.
Gaia: Casa d'Arquitectura, p. 159.
03. Álvaro Siza Archive, n/d.
04. Álvaro Siza Archive, n/d.
05. Álvaro Siza Archive.
Castanheira, C. (2007) Álvaro
Siza: vinte e dois projectos recen-tes. V. N.
Gaia: Casa d'Arquitectura, p. 157.
06. Álvaro Siza Archive.
Castanheira, C. (2007) Álvaro
Siza: vinte e dois projectos recen-tes. V. N.
Gaia: Casa d'Arquitectura, p. 167.
07. Álvaro Siza Archive.
Castanheira, C. (2007) Álvaro
Siza: vinte e dois projectos recen-tes. V. N.
Gaia: Casa d'Arquitectura, p. 166.
08. Álvaro Siza Archive.
Castanheira, C. (2007) Álvaro
Siza: vinte e dois projectos recen-tes. V. N.
Gaia: Casa d'Arquitectura, p. 166.
09. Ricardo Dias, 2022.
10. Teresa Cunha Ferreira, 2022.
11. Ricardo Dias, 2022.
12. Miguel Coutinho, 2022.
13. Miguel Coutinho, 2022.
14. Teresa Cunha Ferreira, 2022.
15. Álvaro Siza. Municipal Archive of Viana do Castelo, n/d.
16. Álvaro Siza. Municipal Archive of Viana do Castelo, n/d.
17. Álvaro Siza. Municipal Archive of Viana do Castelo, n/d.
18. Álvaro Siza. Municipal Archive of Viana do Castelo.
19. Álvaro Siza Archive, n/d.
20. Álvaro Siza Archive, n/d.
21. Álvaro Siza Archive, n/d.
22. Álvaro Siza Archive, n/d.
23. Álvaro Siza Archive, n/d.
24. Álvaro Siza Fonds, Canadian Centre for Architecture, Montréal, n/d. Gift of Álvaro Siza.
25. Álvaro Siza Archive, n/d.
26. Álvaro Siza Archive, n/d.
27. Miguel Coutinho, 2022.
28. Teresa Cunha Ferreira, 2022.
29. 30. Siza ATLAS, 2022.
31. Carlos Sousa Pereira and Siza ATLAS, 2024.
32. Siza ATLAS, 2023.
33. Siza ATLAS, 2023.

SIZATLAS
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Siza ATLAS: Filling the gaps for World Heritage

FCT Project SIZA/ETM/0023/2019

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