SIZATLAS

VILA DO CONDE BANK

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

Scale 1:100.000
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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 Borges & Irmão Bank (1978-86), known as the *Agência de Vila do Conde*, underwent a development process marked by three distinct designs, beginning in 1969 with an intervention study on two adjoining structures. This process evolved over time, culminating in the construction phase. Located in the historic centre of Vila do Conde, a coastal city 25 km north of Porto, the structure is surrounded by the monumental Convent of Santa Clara and the town's 16th-century parish church.

Distinguished by a fusion of straight and curved elements, as well as opaque and glazed surfaces, the bank stands out amidst the fabric of the other buildings in the street. The primary aim of the design was to harmonize with the landscape, without succumbing to mimetic impulses or being overshadowed by the picturesque setting. Its deliberate contrast with its immediate surroundings embodies a nuanced image, conveying both subtlety and complexity, while capable of respecting the urban environment and accomplishing its role as a financial institution. However, the stark modernity of the building initially faced resistance from the more conservative sectors of society, leading to movements advocating for its demolition. Upon its inauguration, the building earned the nickname ''Tolan" in reference to the English ship that sank in the Tejo River in 1980.

Against the backdrop of evolving Portuguese politics from the late sixties onwards, the leadership of Borges & Irmão Bank engaged in deliberations over various proposals to construct a new building for its branch in Vila do Conde. Throughout this process, there was continuous negotiation with the client, particularly regarding the choice of some materials, such as marble, given the bank's context of austerity. Furthermore, the development of projects for other bank branches across Portugal provided Siza with various opportunities for reflection on this architectural typology. His notable work on the Banco Pinto & Sotto Mayor branches in Oliveira de Azeméis (1971-74) and Lamego (1972-73), among others, significantly influenced his understanding and approach to this commission.

Collaborators on the project, across its three different phases, included Miguel Guedes de Carvalho, Eduardo Souto de Moura, Maria Manuela Sambade, Nuno Ribeiro Lopes, Luisa Penha, José Luis de Carvalho Gomes.

The process of establishing a new Borges & Irmão Bank branch in Vila do Conde commenced in 1969 with an intervention study conducted on two adjacent buildings, integrating their interiors on a separate plot of land. The initial unrealized project, dating from 1969-1974, focused on the renovation of the existing Borges & Irmão Bank, located at the foot of the imposing mass of the Convent of Santa Clara. This involved changes to the façade, interior design, an extension, and comprehensive electrical and mechanical studies.

Despite the shift to a different plot of land, the core concerns and ideas from the original proposal were successfully carried over to the final design. Additionally, Siza carefully contemplated the possibility of implementing modifications throughout

the entire process. From the principles adopted in the first proposal, Siza maintained key elements, such as the surface arrangement of the façade to accommodate the programme's requirements and enhance interaction with the street. From inception, the proposed solution aimed to seamlessly integrate the building within its context. The construction spanned eight years and was completed in 1986.

In 1978, a second proposal emerged, following the one from 1969, which had been abandoned in 1974. This new plan involved renovating an existing building not far from the original site. The design epitomized simplicity, centred around a striking staircase with multiple flights aligned along the room's axis. Illuminated by natural light streaming from a generous lantern seamlessly integrated into the roof above, the staircase became a focal point of the design. Additionally, the redesign of the street-facing façade introduced a contemporary touch, integrating a sleek glass section that gracefully extended along the side of the building, enhancing both its visual appeal and functionality.

Nonetheless, between 1978 and 1986, a third proposal unfolded, consisting of the demolition of the existing structure and the construction of an entirely new branch. Reflecting on this tumultuous process, Siza recalls that the only thing missing was being fired.

Like his approach in Oliveira de Azeméis, Siza adopts a stance that rejects picturesque affiliations to this type of construction. Externally, the building reveals very little of its banking identity, and likewise, its interior maintains a sense of openness rather than completely private. The building's form is informed by both its programme and the characteristics of its surroundings, establishing a relationship that balances dialogue and distance from the monuments and the urban fabric. The scale of the existing structures was respected as were the northeast and southwest alignments with the neighbouring buildings. The necessary increase in area was achieved by taking advantage of the unevenness of the plot. The curvature of two corners creates the impression of two continuous façades instead of four.

The bank's programme is spread over three floors, with two entrances (on the 1st and 2nd floors), due to the opening of a pedestrian street to the west (connecting the Market and José Régio squares) as well as a direct access to the 3rd floor via an exterior ramp. The main lobby and reception area occupies the 2nd floor (opening onto 25 de Abril Street), the administrative area and loan department are on the 3rd floor, and the safe deposit boxes are on the 1st floor. All levels are interconnected through a circulation system that not only vertically links the building's rooms but articulates it with the public space.

The bank's interior is characterized by a series of distortions that disrupt the static qualities of an orthogonal plan. These include the curvature of the corners, the flow of the public along the counter culminating in a staircase, the asymmetry of the glazed surfaces, the divergent movements of the ceilings and the varied claddings. In section, with all plans visually interconnected, the building exhibits a spatial relationship between each floor reminiscent of Le Corbusier's Villa Carthage.

The front façade features a curve that emphasizes the access to a pedestrian walkway leading to a square. Likewise, on the rear façade, this architectural feature facilitates unobstructed visual connections between the adjacent historic building and the city. Externally, the curved façade extends into an external side ramp; while internally, the configuration of the counter directs attention towards the lower and upper floors.

The newly constructed Vila do Conde bank replaces a previously demolished building. In this project, the emphasis leans more towards spatial plasticity than on structural and constructive aspects. This aspect anchors a broader debate about the building's tectonics. Nevertheless, the choice and application of materials align with the architect's vision. A fundamental principle of the visual connection between the interior and exterior is achieved through large glass surfaces and marble claddings that extend seamlessly from inside to outside and vice versa, enhancing a sense of continuity. The structure is of reinforced concrete, with the exterior walls painted white and covered by marble panels. Internally, walls are painted white with and complemented by white-painted wooden baseboards. The bank's interiors were meticulously developed with a focus on materials. The chosen finishes include marble for the floors and wainscoting, while stucco is applied on ceilings and walls. Interior frames are made of wood, while iron was used for the exterior frames.

Customer service counters boast marble surfaces, complemented by wooden furniture, namely desks, credit cabinets, file trays, and various other pieces. Carefully crafted, the side gate prominently features the bank's logo. Together, these elements contribute to a harmonious and visually appealing atmosphere, enhancing the experience for visitors and customers alike.

As Siza emphasises in the design report, the quality of the environment depends more on the quality of the spaces than on the opulence of the materials.

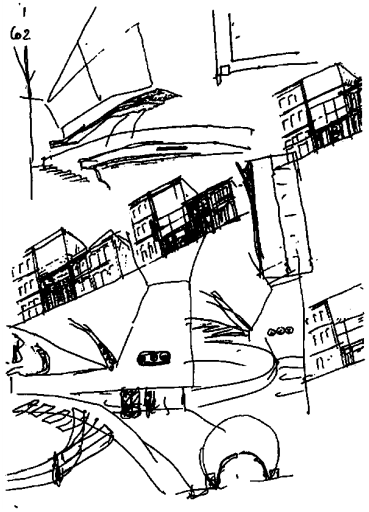
For this project, completed between 1982 and 1986, the Pritzker Prize-winner architect Álvaro Siza received the Portuguese Architecture Association Award in 1987, and the Mies van der Rohe Award for European Architecture in 1988.

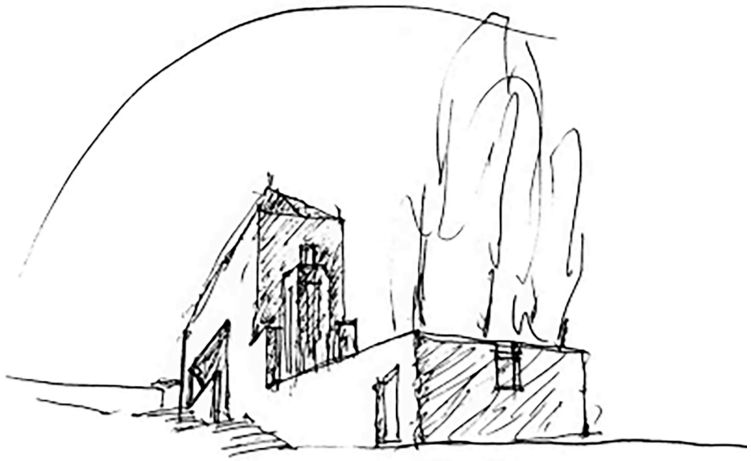
In 1996, Álvaro Siza undertook the bank's remodel, which comprised various maintenance works, space reconfiguration, installation of new furniture, and updates to electrical and air conditioning systems, as well as the implementation of fire and intrusion detection systems. Maintenance efforts included interior and exterior painting, wood varnishing, and re-polishing of the marble floors. Changes in the bank's operation led to the reorganization of working areas on the 1st and 3rd floors, along with the construction of two offices on the 1st floor (within the previously deactivated public service desk area) and a storage facility on the 3rd floor. In early 2021, the bank temporarily closed for "exterior maintenance interventions and internal modernization, including the expansion of the customer service area, with consideration for privacy and comfort

criteria, according to the bank. The agency reopened in March of the same year following the completion of the works, which were overseen by Álvaro Siza.

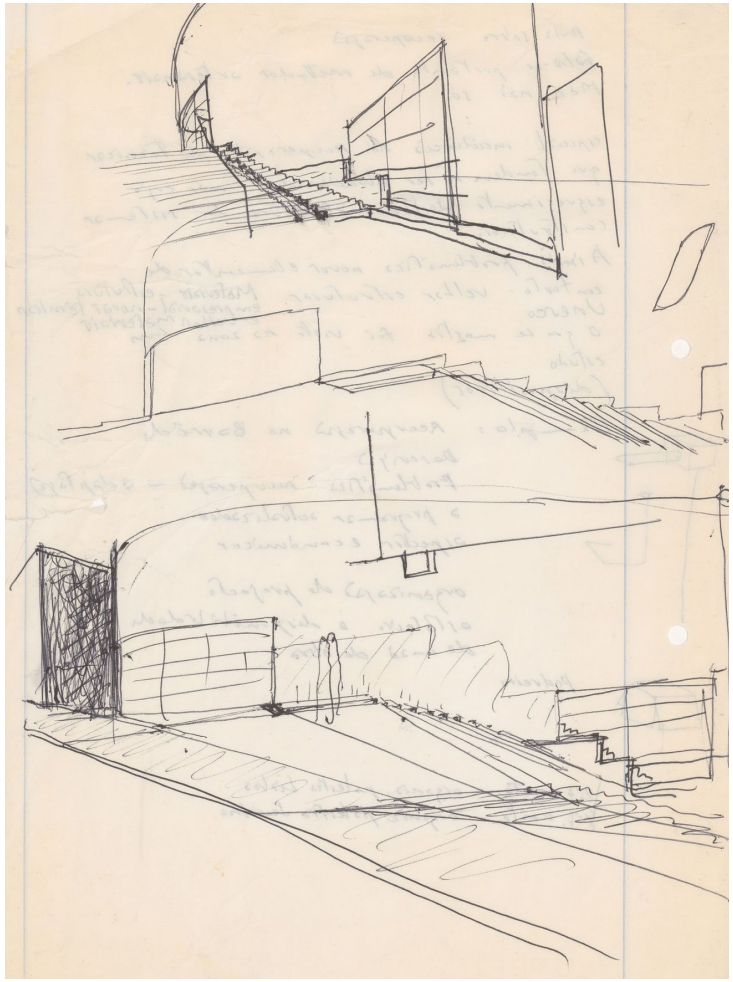
The Borges & Irmão Bank has been extensively featured in numerous monographs on Álvaro Siza since the early 1990s, particularly following the attribution of both the Mies van der Rohe Prize for this project and the prestigious Pritzker Prize in 1992.

These recognitions consolidated the bank's status as a pivotal work in Siza's oeuvre, garnering increased attention and analysis in architectural discourse and publications.

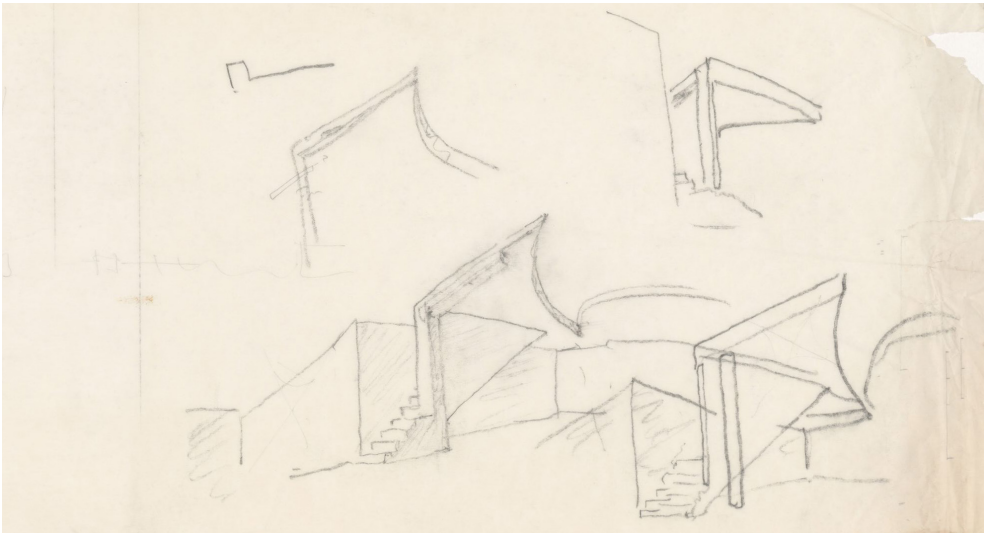




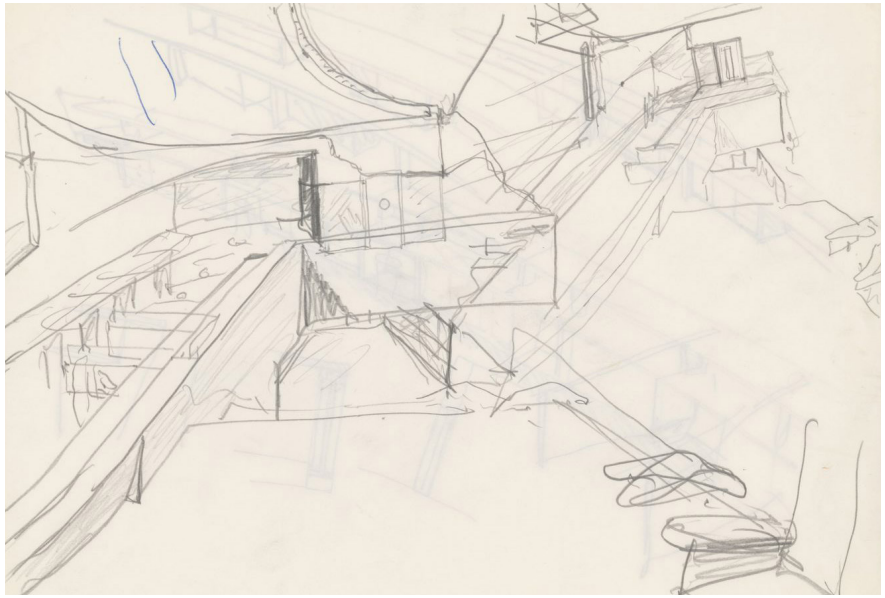
02. 03. Studies for the bank: perspectives on the first proposals.

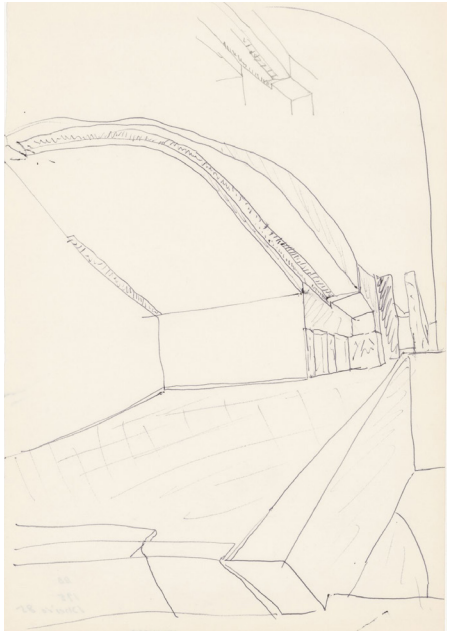


05. Studies for the bank: exterior perspectives.

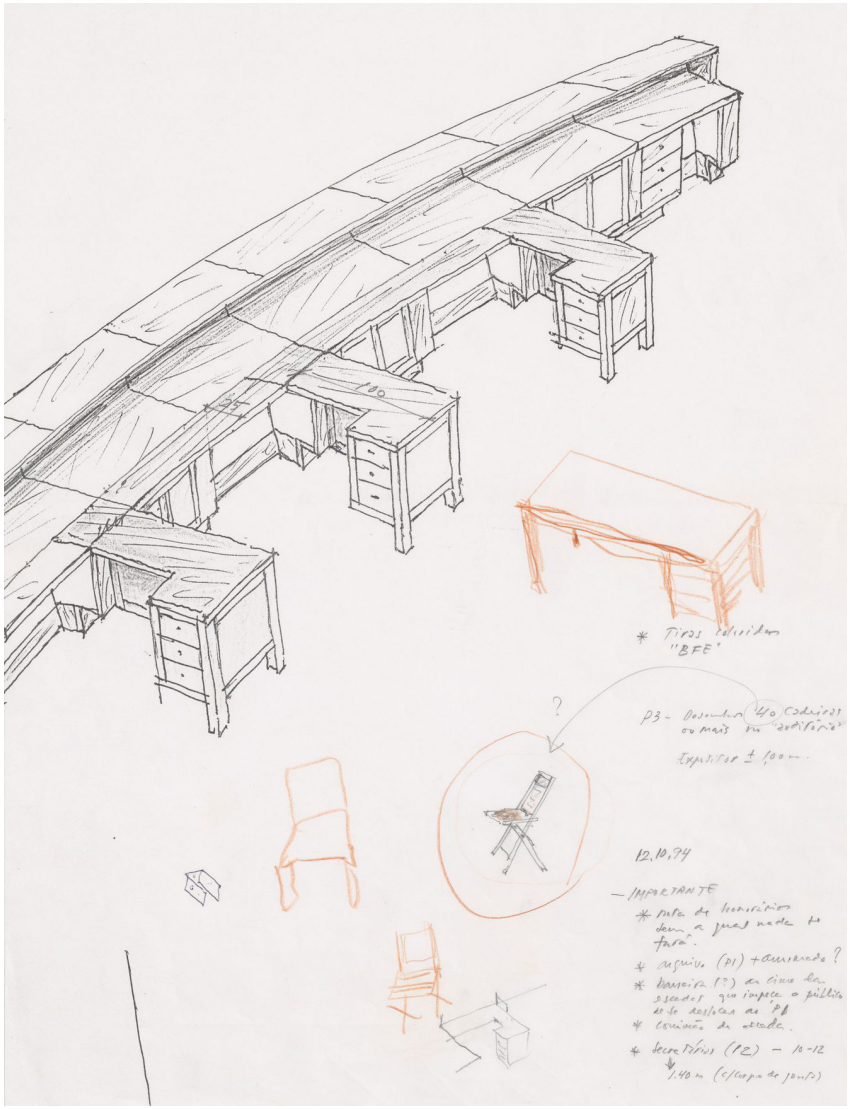


06. 07. Studies for the bank: exterior and interior perspectives.

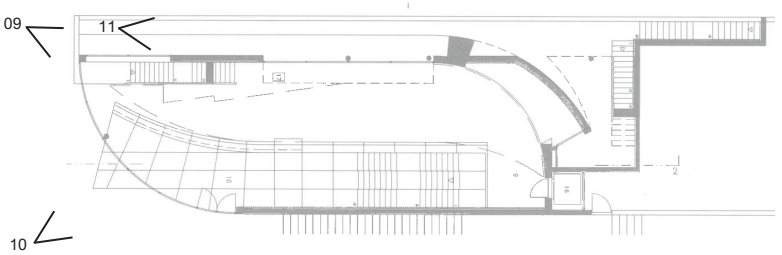




08. 09. Interior perspectives.



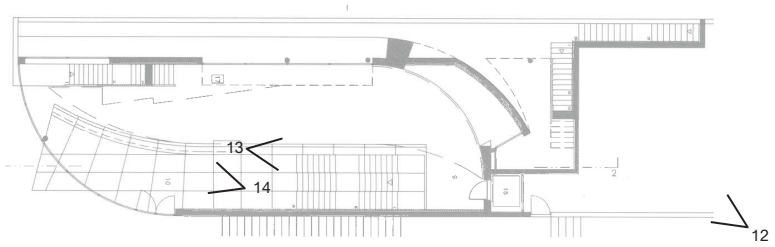
10. Perspective of the customer service counter.



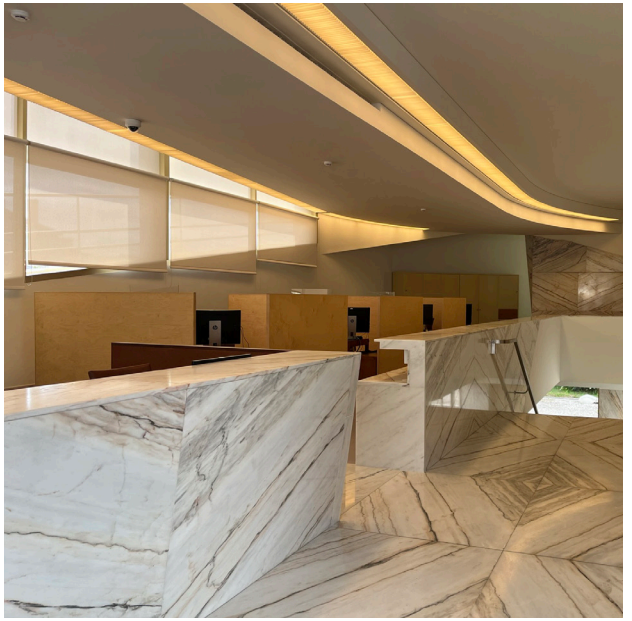
11. North façade facing 25 de Abril Street.

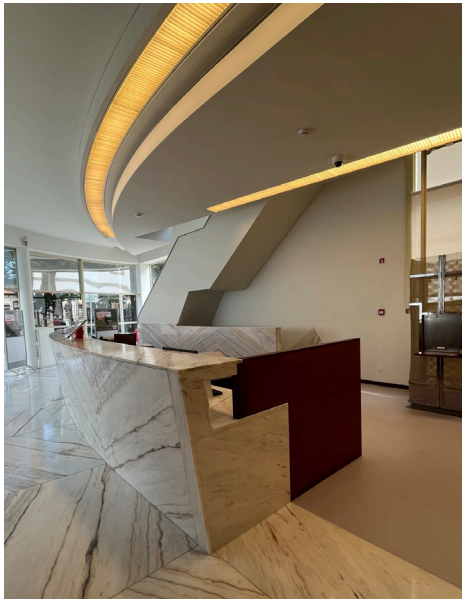
12. Northwest façade.

13. East façade with the exterior ramp.

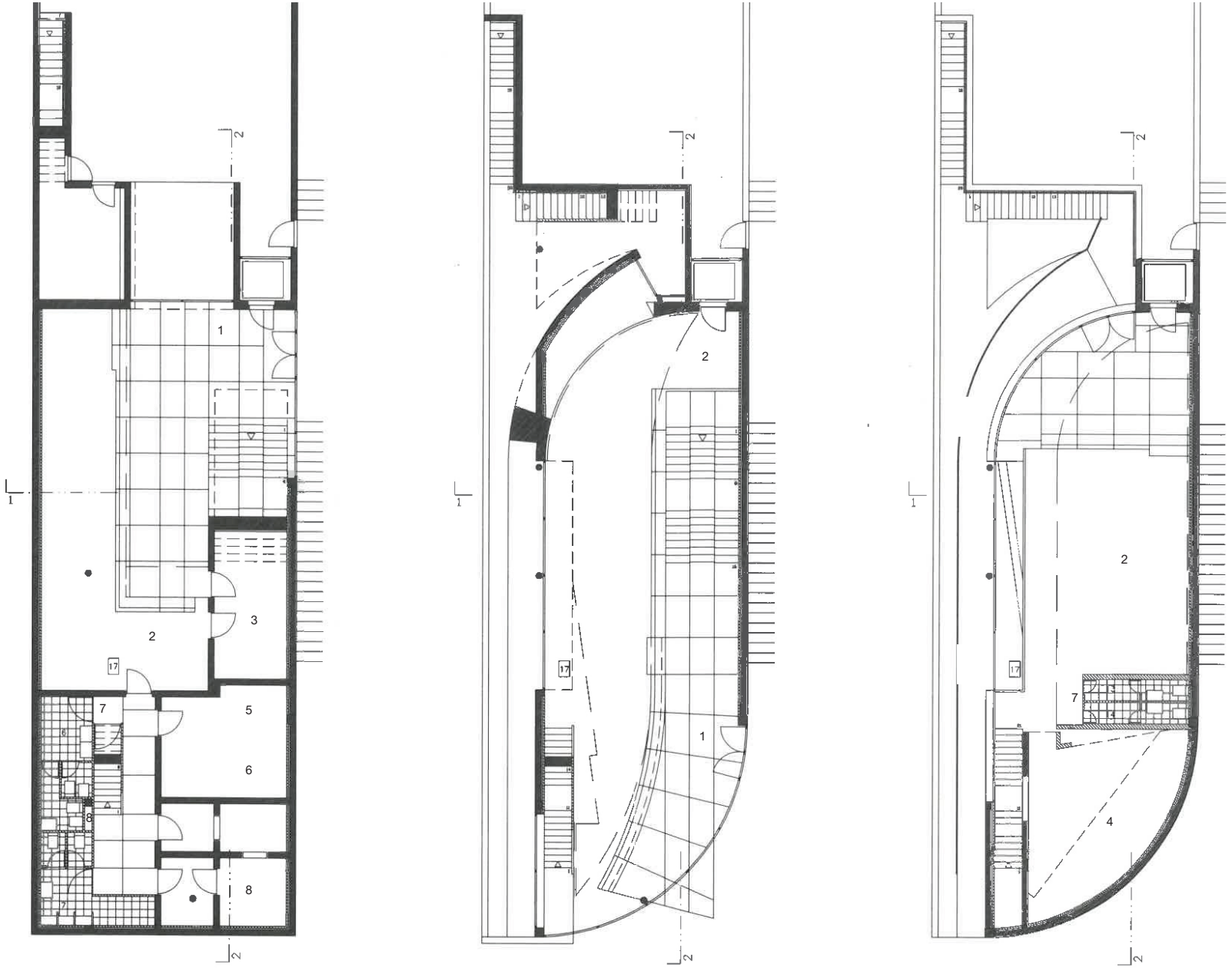


14. South façade, from José Régio place.



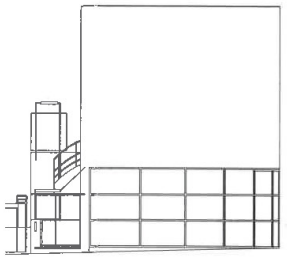


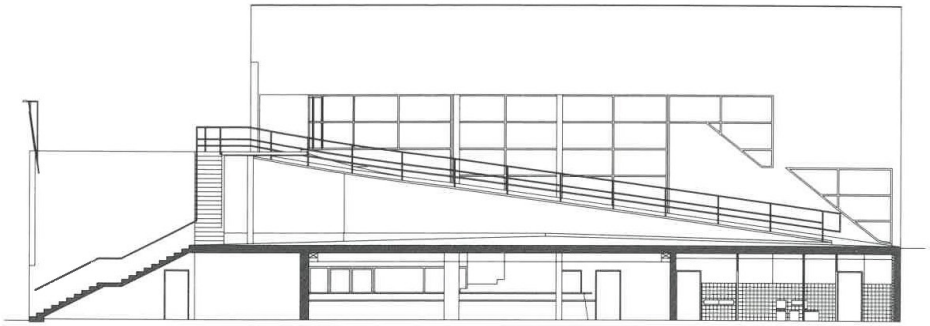
15. 16. Marble customer service counter and lighting system.

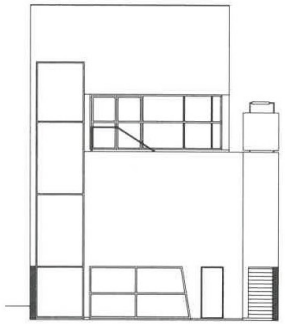


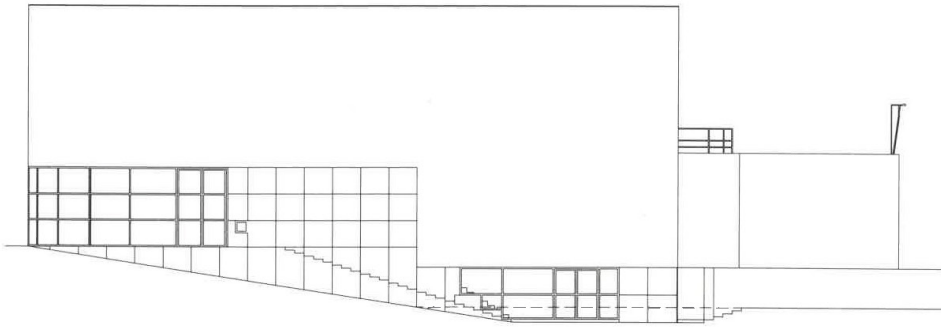
1. Public area 2. Work area 3. Waiting room 4. Office 5. Customer vault 6. Vault 7. Changing rooms and toilets 8. Archive

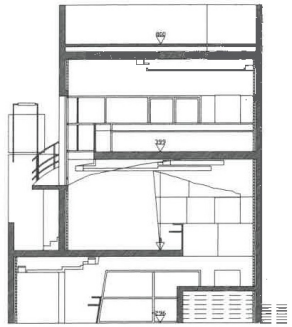
17. Plans: basement, ground floor, and first floor.

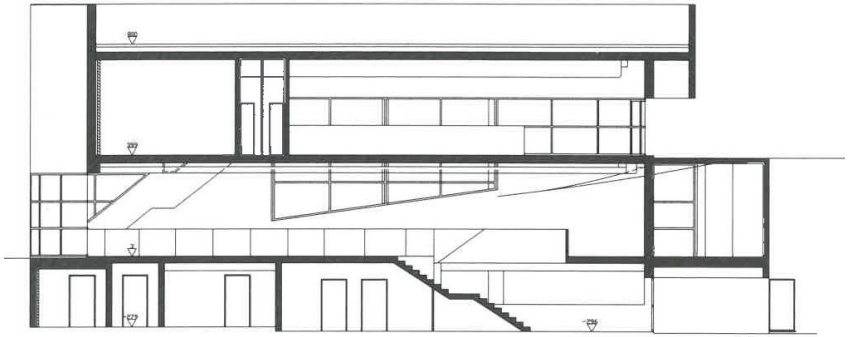












18. Façades and sections.

CONSTRUCTION

STRUCTURAL SYSTEM

The structural system of Borges & Irmão Bank in Vila do Conde is entirely built in reinforced concrete, a solution that "sought to interpret, as faithfully as possible, the adopted architectural appearance" (Guimarães, 1980: 12). To achieve this goal, "structural elements were calculated that, due to their shape and type of reinforcement, require meticulous execution to accurately reflect the detailed drawings presented" (Guimarães, 1980: 12).

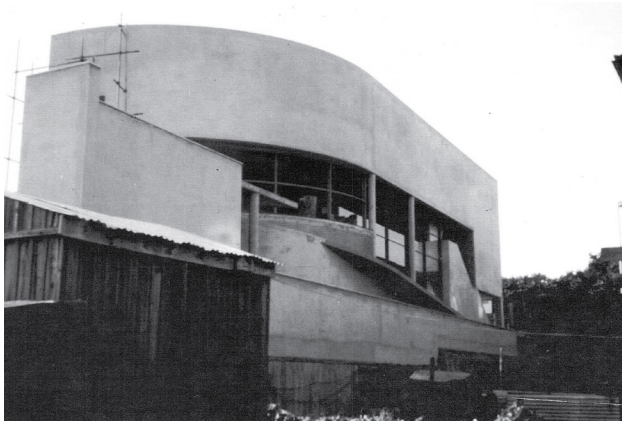
The vertical structure consists of load-bearing walls with a thickness of 23cm and 8 isolated columns, distributed across the three floors, each with different types of cross-sections, all made of reinforced concrete. It is also important to note that the foundations of the load-bearing walls and columns are executed in reinforced concrete.

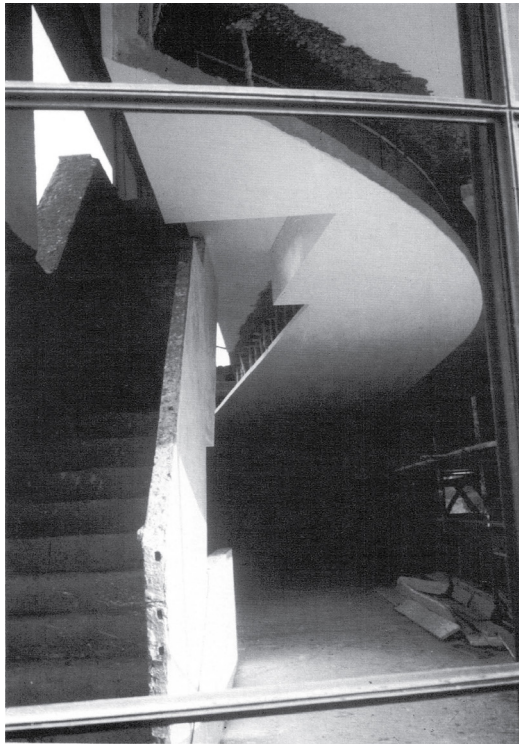
The horizontal structure is composed of beams and slabs in reinforced concrete, with the slabs spanning between 1.20m and 7.70m. The slabs have a minimum thickness of 15cm and a maximum of 29cm.

WALLS

The external walls of the bank are double-layered, with the outer layer made of reinforced concrete and the inner layer consisting of hollow brick masonry, separated by an air gap. Externally, the walls are predominantly plastered with a fine, sanded finish and painted. The exception is the west façade, which features surfaces clad in 'Estremoz' marble up to the height of the openings.

The internal partition walls consist of hollow brick masonry, predominantly plastered with a tin-like finish and painted. Some of these walls have wainscoting in 'Estremoz' marble at various heights, aligning with counters or other existing elements that they interact with. The remaining walls feature wooden skirting boards with a varnished finish.





21. Public service area during construction.

19. 20. Southeast façade during construction.

FLOORS

The floor of the first level consists of a layer of coarse gravel (crushed stone) with a thickness of 15cm, applied over properly compacted ground, consolidated by a 10 cm thick layer of hydrophobic concrete screed, and levelled with a screed of varying thicknesses depending on the type of finish. The finishes on this floor include a wooden floorboard, 2 cm thick, nailed to 3 cm thick wooden battens, and 'Estremoz' marble, 3 cm thick.

The floors of the upper levels are also levelled with screed, with variable thicknesses depending on the type of finish, similar to those described for the first floor. Public access areas, including stairs, are covered with 'Estremoz' marble, while workspaces are finished with light-coloured self-levelling epoxy paint.

The stairs are also levelled and finished either with 'Estremoz' marble or wood.

The bank features suspended ceilings designed to house lighting and air conditioning. The main ceilings are directly levelled over the floor slabs, with a stuccoed and painted finish. Suspended ceilings are executed using a wooden framework covered with 'Estafe' plasterboard, finished with stucco and paint.

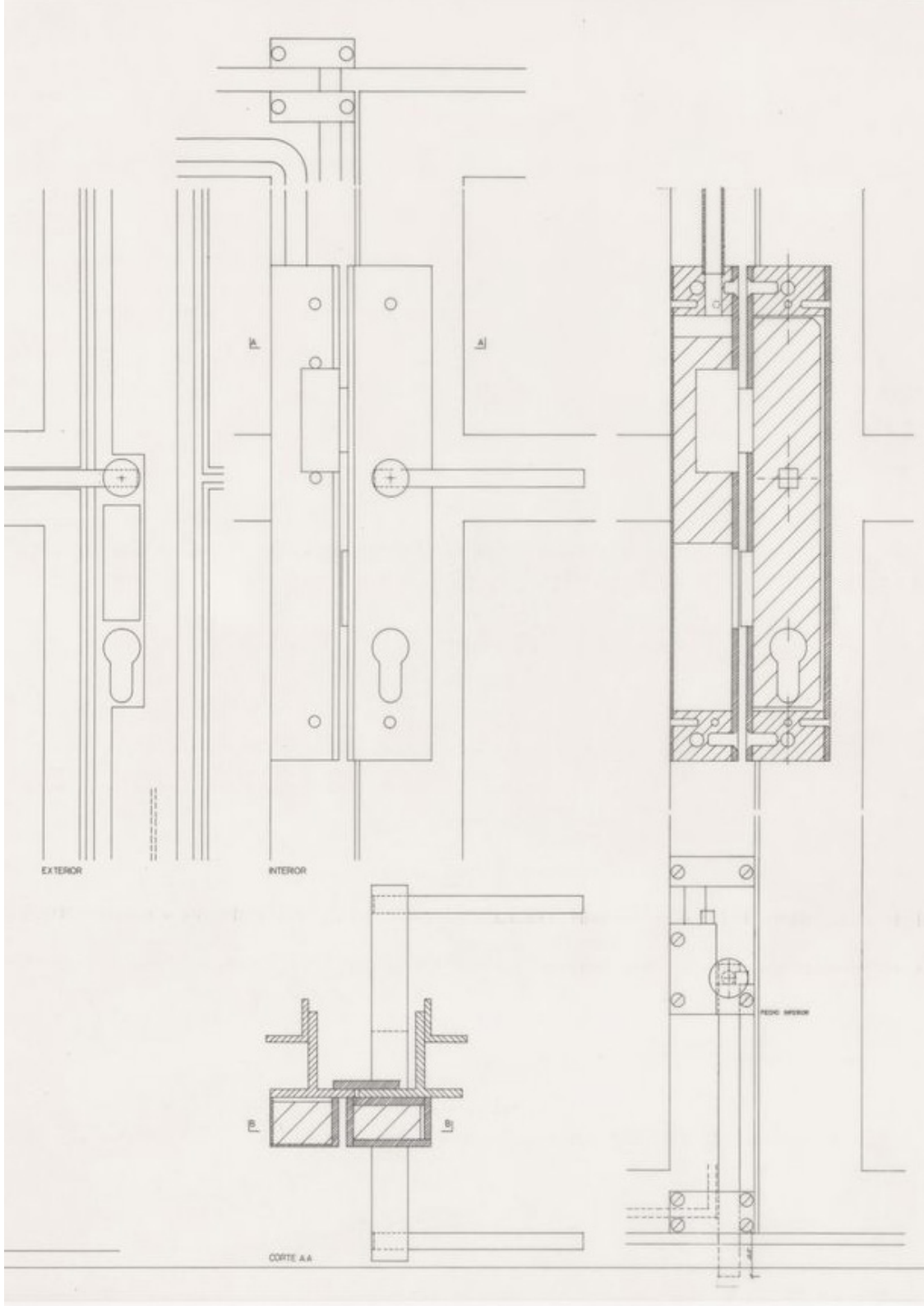
The exterior pavements adjacent to the building are covered with asphalt concrete, with granite or limestone curbs. The courtyard area is treated as a small garden, covered with gravel.

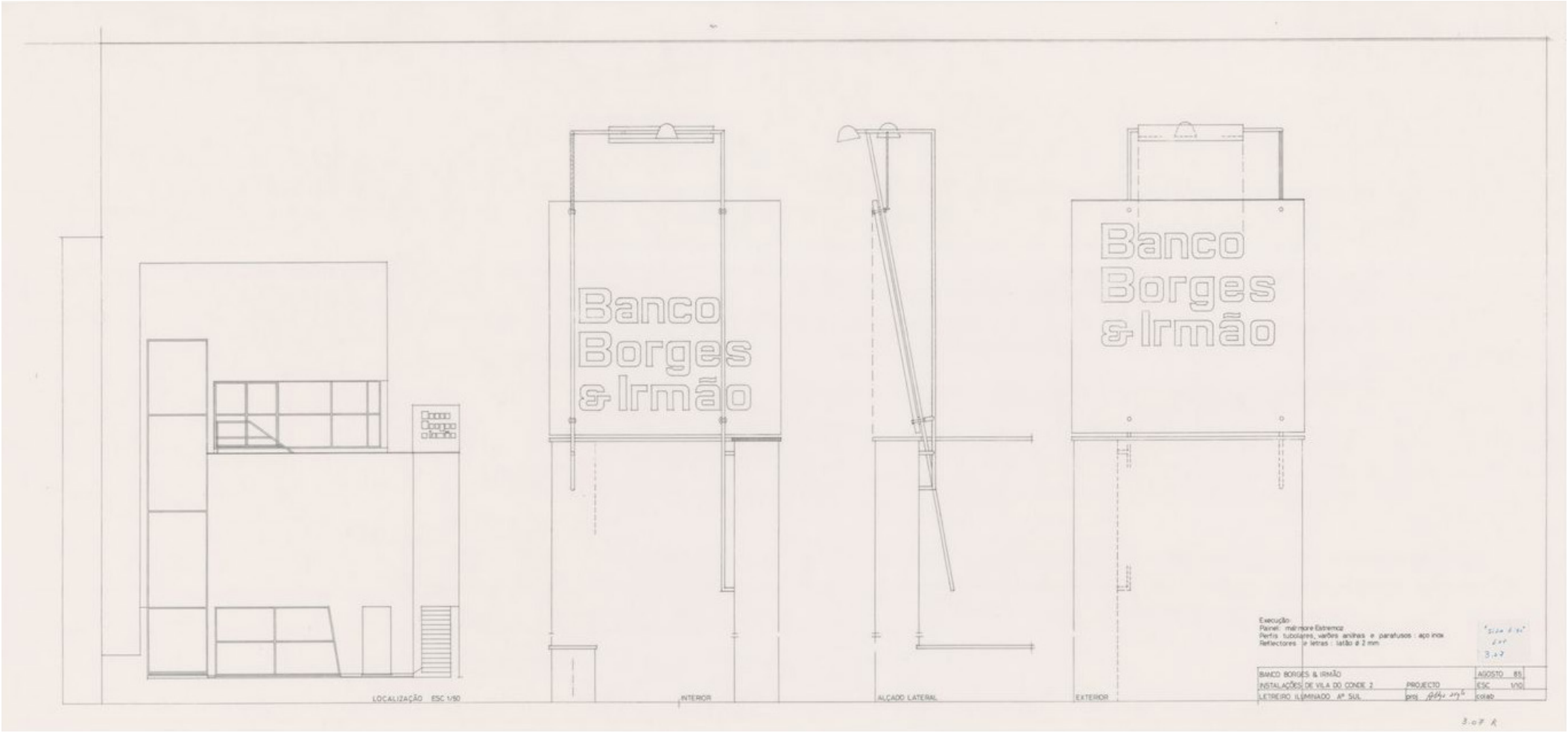
ROOFS

The bank building features a flat roof covered with concrete slabs laid over waterproofing, consisting of asphalt membranes adhered to a sloped layer of cellular concrete. The roof also includes raised parapets, finished with stone cladding, to conceal the lift shaft and air conditioning units.

OPENINGS

All the exterior window frames of the bank are made from iron profiles, treated with a metallic finish and painted with enamel. All the frames use single glazing. The gate to the courtyard is made from tubular profiles, rods, washers, and stainless steel screws, filled with marble panels and reflectors, and has 2mm thick brass lettering . The interior frames, mainly for the doors leading to various rooms, are entirely made of wood, including the frames and mouldings, and are finished with paint.





23. Illuminated sign with Estremoz marble panel, stainless steel tubular profiles and fittings, and brass reflectors and lettering, 1985.

DESIGN PRINCIPLES

THE SHAPE OF THE BUILDING DERIVES FROM THE CHARACTERISTICS OF THE AREA

The shape of the building derives from the program and characteristics of the area where it is integrated. An attempt was made not to break the pre-existing scale, by taking advantage of the unevenness of the land and by treating the corners, to the northeast and southwest, without prejudice to the necessary increase in the area, in relation to the existing building and to be demolished. (SIZA, 1978)

THE BUILDING BELONGS TO THE SAME FAMILY AS ITS NEIGHBOURS

The building belongs to the same family as its neighbours and isn't so strong that it breaks the logic of what was already there: in other words, a street with a square and façades. My idea, my objective, was the conservation of existing buildings. (Siza, 1986, p. 85)

INTERPLAY BETWEEN THIS BUILDING AND THE CATHEDRAL

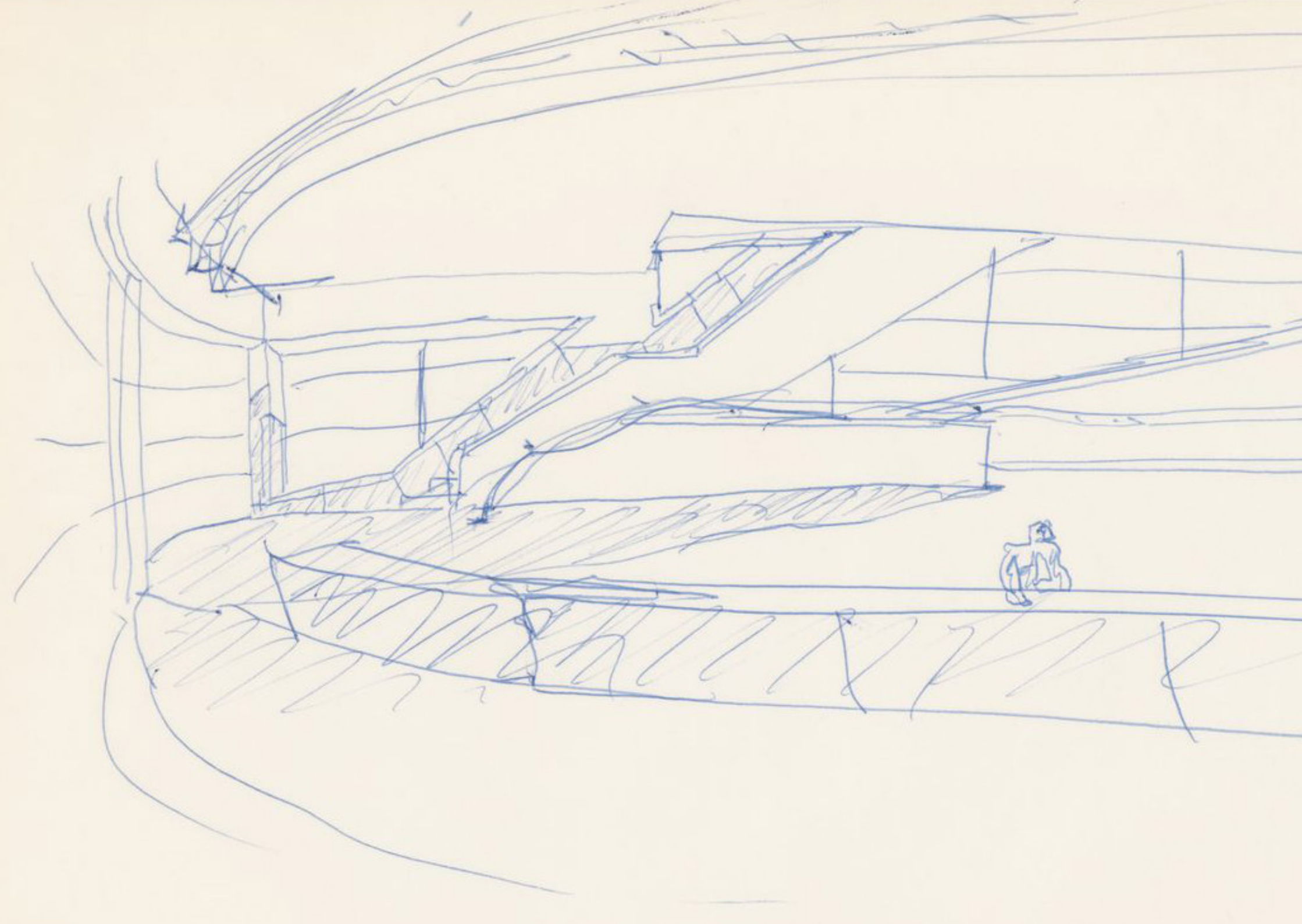
My objective, and I think I've achieved it, was to create an interplay between this building and the cathedral: the old, granite cathedral with the great baroque monastery beside it. A city can acquire richness and harmony with violent variations in scale. (Siza, 1986, p. 88)

MAINTAIN THE FEELING OF A PARTY WALL

First of all, I wanted to mark out very clearly which was the street, even though the façade ends in a peak. Otherwise it would have been very difficult to subject it to the logic of street and division into lots. The result of this was to maintain the feeling of a party wall. (Siza, 1986, p. 85)

AVOID A BOX-LIKE SHAPE

The curve is there to avoid a box-like shape, which would have been very cramped. When you use a curve there's a continuity because the sides are not divided; it's the result of considering how to create a pleasant space in such a limited and conditioned place. (Siza, 1986, p. 85)

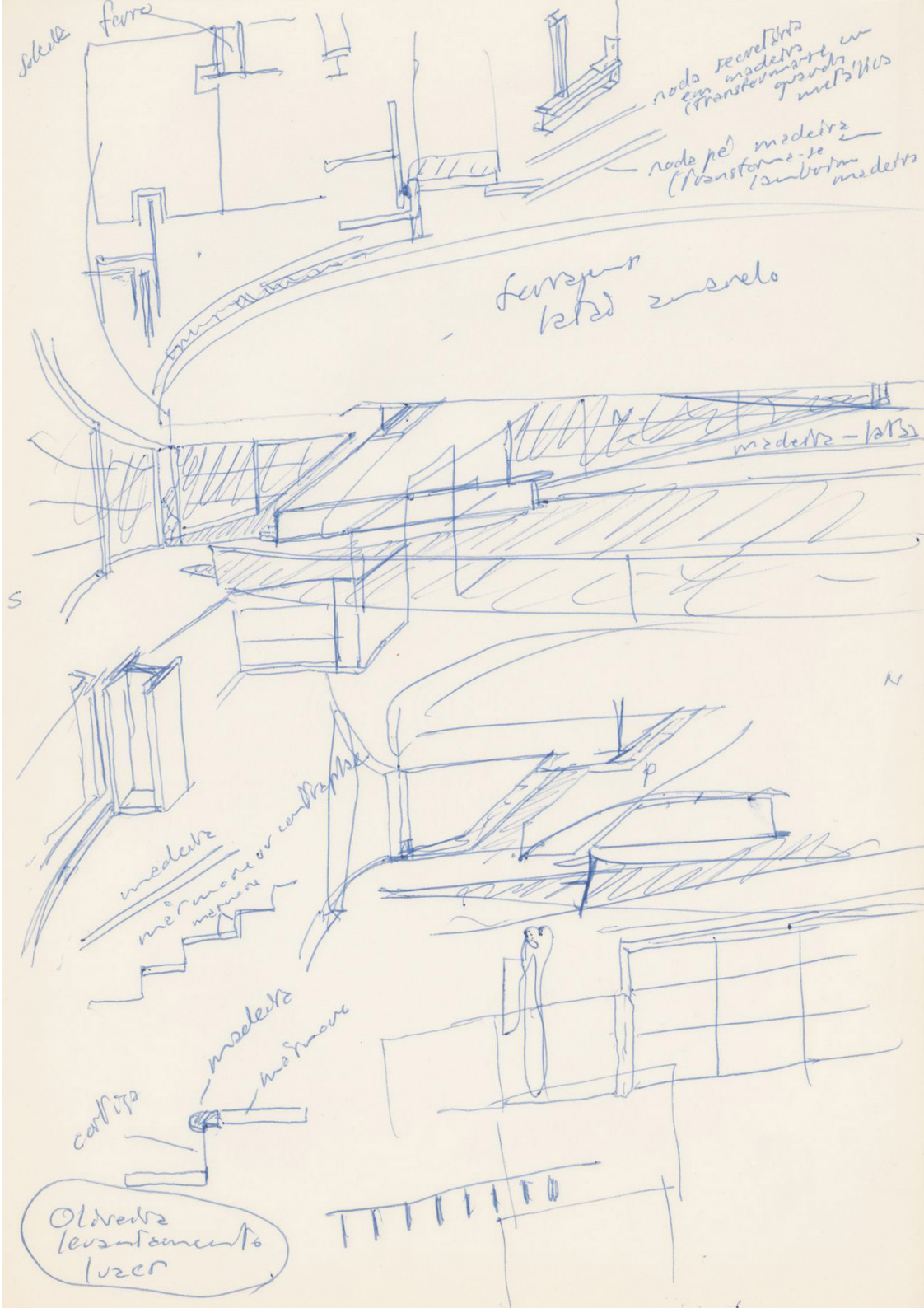


THE QUALITY OF THE ENVIRONMENT DEPENDS ON THE QUALITY OF THE SPACES

It is intended that the quality of the environment depends on the quality of the spaces, more than on the richness of the materials. (Siza, 1978)

PLAYING WITH A GREATER NUMBER OF DIFFERENT MATERIALS

The piece above the lift is cut exactly as it came out of the quarry. This is the result of a quite recent interest of mine, which has increased lately, in playing with a greater number of different materials, rather like a painter who normally uses two or three shades and then decides to use ten or twenty. (Siza, 1986, p. 88-89)



ATTRIBUTES

ARCHITECTURE RESPONSIVE TO A PHYSICAL, SOCIAL AND HISTORICAL CONTEXT

Borges & Irmão bank is located in a context dominated by buildings of great historical value that influence the design of the bank. The project manages to find a balance between sensitivity to heritage buildings and the responsibility of new architecture, establishing a relationship with its surroundings through its form and scale. The height of the building does not exceed that of the surrounding constructions and the volume adapts to the slope of the plot and responds through its form to its corner location.

INTEGRATION OF INTERNATIONAL AND LOCAL REFERENCES

The formal and plastic characteristics of the building evidence and merge references to various periods of architecture history. The implementation of simple forms and the horizontal windows recall the Modern Movement. The way all floors are visually related are reminiscent of Le Corbusier's Villa Carthage. However, the asymmetry of the plan, the curved façades and the complex light and shadow variations reinterpret baroque design principles. The Bank establishes a crossing of scales that is simultaneously of dialogue and distancing in relation to the monuments and the fabric of the town.

SCULPTURAL VOLUMETRIC EXPRESSION

The interior is determined by a series of distorting effects, which offset the static qualities of an orthogonal plan. These include the curvature of the corners, the flow of the public along the counter, which ends against a staircase, the asymmetry of the glazed surfaces, the divergent movements of the ceilings and the different claddings.

ORIENTED SPATIAL EXPERIENCES

On the front façade, the building generates a curve that emphasises the access to a pedestrian walkway that ends in a square and, on the rear façade, the same resource serves to liberate the visual relationships between the adjacent historic building and the city. On the outside, the curve in the façade continues through an external lateral ramp; inside, the shape of the counter directs the eye towards the lower and upper floors.

TOTAL WORK OF ART INCLUDING DETAILS, FURNITURE AND ART WORKS

The unity in its design is defined by the plastic expression of the marble types and their harmonious combination with the white color and the wooden elements.

AUTHENTICITY AND INTEGRITY

AUTHENTICITY

The conservation works carried out recently in Borges & Irmão bank have managed to maintain the original design of the building since the alterations have been developed by the architect himself. They were made to improve the attendance conditions to the public, complying with criteria of comfort and privacy.

The Borges & Irmão bank maintains the fabric of the original materials. White remains the main colour of the building, both internally and externally.

The building maintains its use as a bank. Recent interventions (1996 and 2021) were both coordinated by Siza's office. In 1996, the changes in the use of the bank agency determined the repurposing of the working areas on floors 1 and 3, as well as the construction of two offices on the 1st floor (inside the public service desk that was deactivated in the meantime) and a storage area on the 3rd floor.

The pedestrian connection between the Market square and the José Régio square was reinforced by renovation works in 2004, which promoted the use of José Régio square for socializing and relaxing. The formal configuration of the bank itself, with the curve that invites to enter the square, is also reinforced this way.

The building's installations have been updated, including modifications to the electrical and air conditioning installations and the implementation of fire and intrusion detection systems. New equipment was installed in the bank without significative visible impact.

The building maintains the original formal and visual relationship with the historic centre of Vila do Conde and its monuments, namely with Santa Clara monastery and the main church of the city.

INTEGRITY

Borges & Irmão bank is located in a context dominated by buildings of great historical value that influence its design. The project manages to find a balance between sensitivity to heritage buildings and the responsibility of new architecture, establishing a relationship with its surroundings through its form and scale. The unity in its design is defined by the plastic expression of the marble types and their harmonious combination with the white color and the wooden elements. This project succeeds in blurring its banking character on the outside, just as very little of the interior is entirely private.

The building hasn't received any significant change during its lifetime aside from specific interventions, respecting the original design and materiality. In 1996 Álvaro Siza was in charge of the bank's remodel, that comprised maintenance works, space reformulation, new furniture and modification to the electrical and air conditioning installations and the implementation of fire and intrusion detection systems. The last intervention, in early 2021, was coordinated by Siza's office as well.

STATE OF CONSERVATION

The Vila do Conde Bank has recently undergone a significant intervention and is now in excellent condition, requiring no major renovations. The BPI branch in Vila do Conde reopened to the public on March 29, 2021, after being closed for two months to complete exterior maintenance and interior modernization. The updates included expanding the customer service area to enhance privacy and comfort. The renovation project was overseen by Siza Vieira's office, with the architect personally involved in monitoring the progress of the work.


STOP

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.

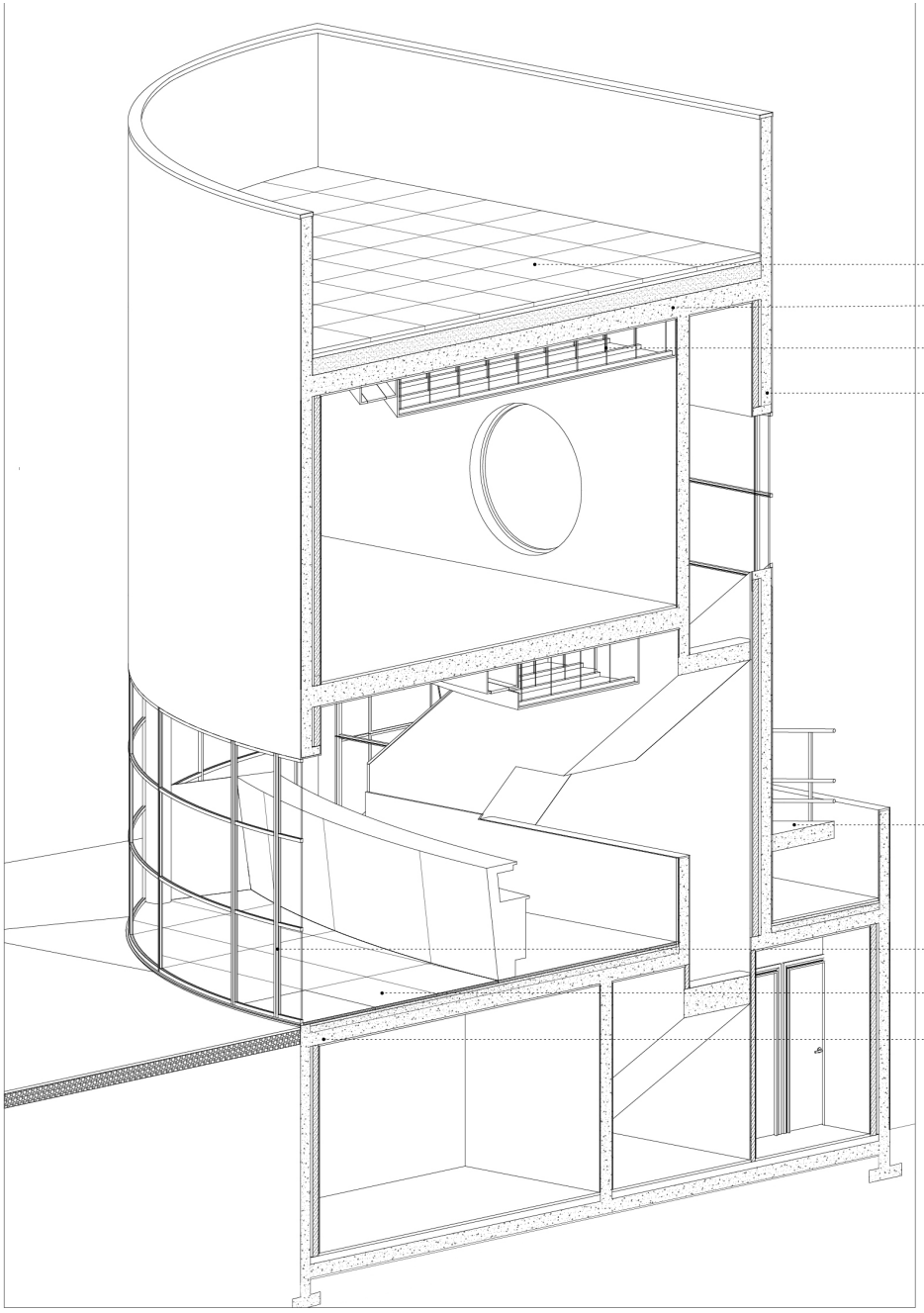
Drawing representation takes inspiration from Edward Ford's "The Details of Modern Architecture" these models prioritize clear language to disseminate knowledge effectively. The development process of the models involves cross-referencing analysis between archives and bibliography research combined with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

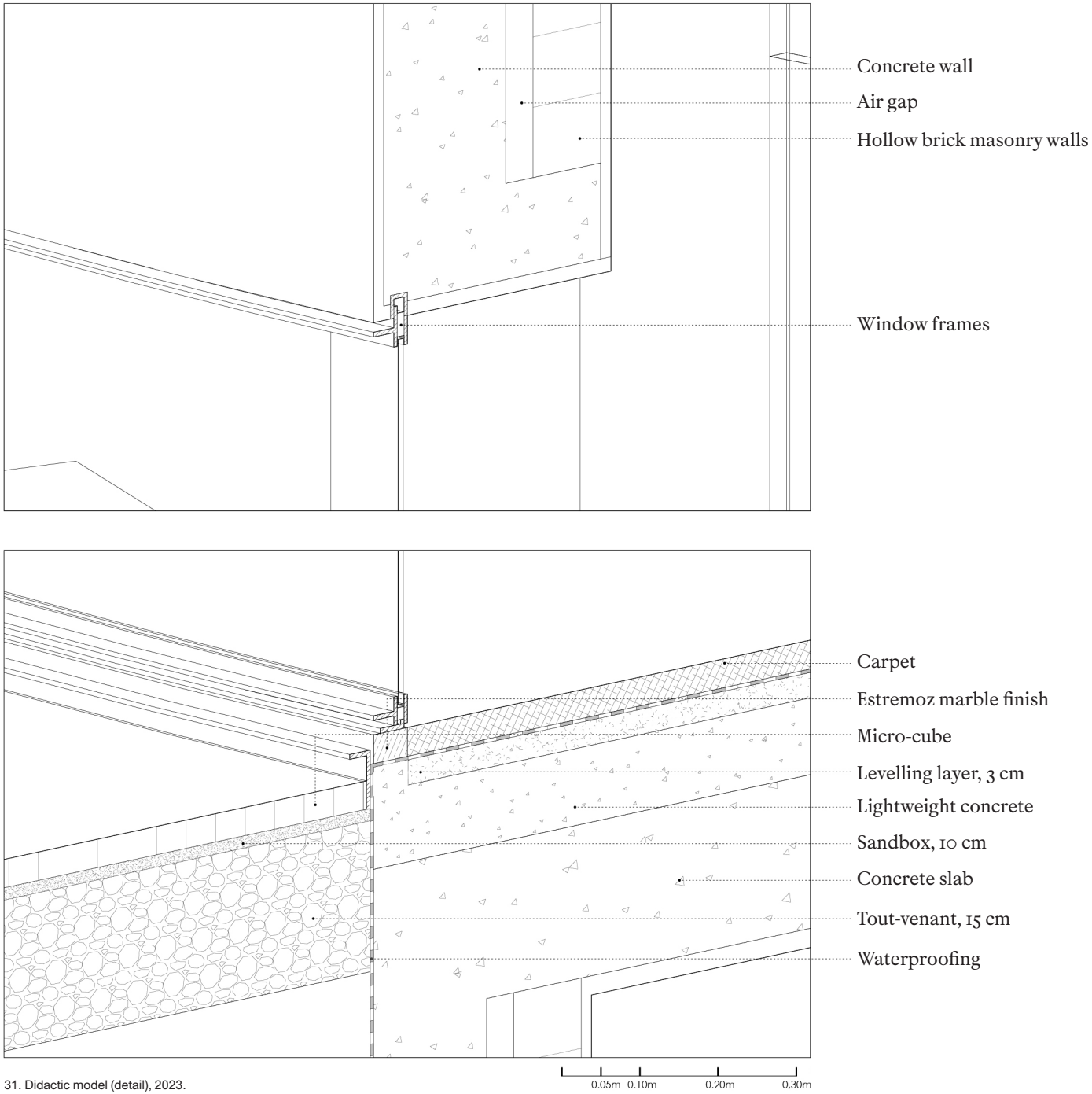
28. Photogrammetry.

29. 360º Virtual Tour.

Virtual Tour



30. Didactic model, 2023.



31. Didactic model (detail), 2023.

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SIZATLAS
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Siza ATLAS: Filling the gaps for World Heritage

FCT Project SIZA/ETM/0023/2019

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