

MUSEO NACIONAL
DEL PRADO

**TECHNICAL SPECIFICATIONS FOR THE COMPETITION FOR THE SELECTION
BY A PANEL OF JUDGES OF A PROPOSAL FOR THE ARCHITECTURAL
RENOVATION AND MUSEOLOGICAL ADAPTATION OF THE “*SALÓN DE
REINOS*” (HALL OF REALMS OF BUEN RETIRO ROYAL PALACE)**

Museo Nacional del Prado, Madrid, Spain

**TECHNICAL SPECIFICATIONS FOR THE COMPETITION FOR THE SELECTION
BY A PANEL OF JUDGES OF A PROPOSAL FOR THE ARCHITECTURAL
RENOVATION AND MUSEOLOGICAL ADAPTATION OF THE “*SALÓN DE
REINOS*” (HALL OF REALMS OF BUEN RETIRO ROYAL PALACE)**

1. PURPOSE OF THE COMPETITION AND SCOPE OF ACTION

- 1.1. PURPOSE OF THE COMPETITION
- 1.2. SCOPE OF ACTION

2. PRELIMINARY QUESTIONS

- 2.1. *THE MUSEO NACIONAL DEL PRADO*
- 2.2. *THE SALÓN DE REINOS*
 - 2.2.1. Ownership of the building
 - 2.2.2. Situation and surroundings
 - 2.2.3. History
 - 2.2.4. Description
 - 2.2.5. Archaeological interest
 - 2.2.6. State of conservation
 - 2.2.6. Current uses
- 2.3. AREAS

3. JUSTIFICATION AND AIM OF THE ACTION

4. SPECIAL TECHNICAL SPECIFICATIONS

- 4.1. GENERAL GUIDELINES AND PROGRAMME OF ARCHITECTURAL REQUIREMENTS
 - 4.1.1. Respecting the building's historic condition
 - 4.1.2. Preservation and integration of singular elements.
 - 4.1.3. Treatment of the building as containing and as a means for conserving the cultural assets it will house
 - 4.1.4. Treatment of the building as a public cultural centre
 - 4.1.5. Compliance with accessibility standards
 - 4.1.6. Application of sustainability criteria
 - 4.1.7. Considerations concerning the building's surroundings
 - 4.1.8. Access and movement
 - 4.1.9. Considerations concerning security and access control of persons
 - 4.1.10. Considerations concerning installations
 - 4.1.11. Considerations concerning the building's structure
 - 4.1.12. Considerations concerning materials and finishes
 - 4.1.13. Consideration of visit indicators
 - 4.1.14. Consideration of other physical indicators

- 4.2. FUNCTIONAL PROGRAMME
 - 4.2.1. Public Area with Collections
 - 4.2.2. Public Area without Collections
 - 4.2.3. Internal Area with Collections
 - 4.2.4. Internal Area without Collections

5. FORECASTS FOR THE PROJECT'S DEVELOPMENT AND IMPLEMENTATION

- 5.1. DEVELOPMENT OF THE PROJECT
- 5.2. TASKS FOR THE DRAFTING TEAM ALONG WITH THE PROJECT

1. PURPOSE OF THE COMPETITION AND SCOPE OF ACTION

1.1. THE PURPOSE OF THE COMPETITION

This competition is intended to select the proposal for the architectural rehabilitation and museological adaptation of the *Salón de Reinos*, as part of the *Museo Nacional del Prado*.

1.2. SCOPE OF ACTION

This action affects the entire area of the *Salón de Reinos*.

The gross floor space is 7,922.84 m².

The net usable floor space is 5,390.95 m².

The building which is the subject of the project, the *Salón de Reinos* in the former Buen Retiro Royal Palace, which houses the Hall of the same name, forms part of the Ministry of Education, Culture and Sport and is attached to the *Museo Nacional del Prado*, pursuant to the 2 October 2015 Order of the Ministry of Finance and Public Administrations on the public property transfer of the *Salón de Reinos*.

The action will affect the building referred to in the aspects defined in these technical specifications and as established in the technical indications in the Programme of Architectural Requirements from which these specifications set out the main aspects and which will be delivered as information in the second phase of this competition.

2. PRELIMINARY QUESTIONS

2.1. The *Museo Nacional del Prado*

The *Museo Nacional del Prado* is a state-owned institution in the Ministry of Education, Culture and Sport.

Under Act No. 46/2003 of 25 November regulating the *Museo Nacional del Prado*, it is classified as a public body of those provided for in Additional Provision 10.2 of Act No. 6/1997 of 14 April on the Organisation and Functioning of the General State Administration, with its own legal character and full public and private capacity to operate in the fulfilment of its ends.

Created in 1819 as Royal Museum of Painting it is installed in the building designed by Juan de Villanueva in the centre of Madrid from 1785 for the Natural Science Academy and Natural History Division, and has one of the world's major artistic collections, especially pictorial, drawn from the Spanish Royal Collection.

The museum's evolution meant that, with the passage of time, the building created by Juan de Villanueva had to be complemented with other structures immediately around it, until forming a museum complex which has incorporated the *Casón del Buen Retiro*, the administrative building in Ruiz de Alarcón Street and the extension of the Villanueva building toward the Jerónimos cloister, designed by Rafael Moneo, inaugurated in 2007 and known as the "Jerónimos building".

This competition aims to select a proposal for the architectural rehabilitation and museological adaptation of the *Salón de Reinos* in the former Buen Retiro Royal Palace, to integrate it into that Prado Museum Campus as exhibition centre.

2.2. THE *SALÓN DE REINOS*

2.2.1. Ownership of the building

The *Salón de Reinos* of Buen Retiro is a state-owned building attached to the *Museo Nacional del Prado*.

Attached to the Ministry of Defence as the base for the Army Museum, formerly the Artillery Museum, since 1841, it was assigned to the then Ministry of Culture in a State Heritage Order on 8 February 2010. This Order was taken pursuant to the Framework Agreement entered into between the Ministry of Defence and the Ministry of Education and Culture on 24 July, and the 8 April 2003 complementary Agreement, with the intention of transferring the building to form part of the *Museo Nacional del Prado*, the rehabilitation and extension of the *Alcázar* in Toledo as new base for the Army Museum being taken up in return for that proposal.

On 22 October 2015, the state property transfer was signed assigning the *Salón de Reinos* to the Museo Nacional del Prado present and future in that 2 October 2015 Ministry of Finance and Public Administrations Order.

MUSEO NACIONAL DEL PRADO

2.2.2. Situation and surroundings

The *Salón de Reinos* is sited in the centre of Madrid in the district of Jerónimos, skirted by Méndez Núñez Street and facing Felipe IV Square, where the *Casón del Buen Retiro* also stands. It is oriented East-West between the Retiro Park and Paseo del Prado and is surrounded by aristocratic residential constructions in a secluded square.

The street around it is between 9 and 12 metres wide, and traffic is permitted in all the surroundings.

The information on this aspect in these Technical Specifications is completed by that included in section 2.2. of the Programme of Architectural Requirements which is to be furnished to the eight finalist bidders in this competition.

2.2.3. History

That part of the former Buen Retiro Royal Palace of Madrid containing the space of that name is what is currently known as the “*Salón de Reinos*” (Hall of Realms) and which, when the palace disappeared, has lasted into our time. Together with the *Casón del Buen Retiro*, it is the only testimony of that Royal Seat that has been conserved.

The *Salón de Reinos* was the place used for ceremonies and feasts in the Buen Retiro Palace, the residence for rest and entertainment Felipe IV had built at the suggestion of the Count-Duke of Olivares. There was no all-embracing project, as it was in fact the upshot of the addition of the various structures and pavilions built since 1630 based on the *Cuarto Real* (Royal Chamber) Felipe II had built around the church of San Jerónimo. When completed, around 1640, the palace consisted of more than 20 buildings around two large squares and a vast area of gardens; the ensemble is of scant constructive worth in the absence of a harmonic design, and given the speed with which it was built and the use of poor-quality materials, but its architectural and political representativeness was very high.

The Hall itself was a large space in the north wing of the complex, named after the escutcheons of the twenty-four kingdoms belonging to the Spanish crown painted between the lunettes in the vault. There are five spans on the longitudinal walls, to the north and south and, over them, others of more reduced dimensions. On each of the smaller walls there was a door in the centre giving access to the side salons and marking the gallery's axis, giving some spatial continuity to the whole. Along the upper part of these spaces there was a line of balconies some five metres up, for watching theatrical spectacles. Beneath that, between the windows, twelve large paintings of battles by various artists were hung, and over these ten scenes from the life of Hercules painted by Zurbarán; in the end walls, five equestrian portraits of Kings Felipe III and Felipe IV, their wives and Prince Baltasar Carlos, by Velázquez, all conceived with scenographic intent.

Between 1734 and 1764, with the relocation of the Court following the fire in the Madrid *Alcázar*, the palace was remodelled by the architects Bonavia and Sabatini, who planned to divide the *Salón de Reinos* into three spaces, something that was never done. Subsequently, following construction of the new Royal Palace, Buen Retiro was progressively abandoned. During the War of Independence, the Royal Site was converted into a military barracks, leading to a deterioration of the structures and gardens; finally, in August 1812, it was attacked and burned by the Anglo-Portuguese troops.

During the reign of Fernando VII, the architect Antonio López Aguado proposed to demolish the fortifications built by the French and the remains of the burned-out palace, with the recovery of the few spaces left standing, among them the *Salón de Reinos*; the rehabilitation project was entrusted to Isidro González Velázquez, who proposed that the Hall be retained, although it is not known to what extent this project was implemented.

MUSEO NACIONAL DEL PRADO

In 1841, General Espartero decided to relocate the Artillery Museum, until then in the Buenavista Palace, to the Buen Retiro Palace, with the adaptation of the *Salón de Reinos* to a new museum role, involving numerous unrelated interventions, partly the upshot of the presence of a variety of tenants occupying the garrets and basements, with little benefit for the architecture of the former royal palace.

In 1869, the Ministry of Finance, which had owned the palace since Isabel II had ceded her properties to the State in 1865, entrusted it to the Ministry of War, and the tenants could be evicted shortly thereafter. Once the entire building had been obtained, advantage was taken of the urban development plan being implemented in the area to complete various studies and projects; in 1873 a reform was begun, following the indications of Carrasco y Sayz, during which annexed constructions were demolished and some façades and the west tower were modified. All these actions disfigured the original architecture of the seventeenth century palace. In the opening years of the twentieth century, a new roof was added and new works were done for the building's restructuring and security.

From 1940, the only work done was on maintenance and renewal of installations, such as the project to restore façades between 1985 and 1987.

The information on this aspect in these Technical Specifications is completed by that included in section 2.1. of the Programme of Architectural Requirements which is to be furnished to the eight finalist bidders in this competition.

2.2.4. Description

The *Salón de Reinos* is a building on a longitudinal fixed straight line, topped by towers at each end and preceded by a terrace. The original building had three levels: the ground floor with bossed stone base, the second and third floors which are finished in face brick. The first and main level, corresponding to the great halls, had high ceilings. The second floor was extended only in the area of the towers. The building was added, in the early twentieth century, a top floor with zinc-plated mansard roof. There is also a semi-basement taking up just part of the floor.

The north façade is approximately 98 metres long and is set back, preceded by a terrace functioning as a plinth. Notable here are the two side units, 18 x 23 metres, emerging 4.5 from the alignment and which were for the original palace stairways, and the central body decorated with pilasters, a balcony and upper pediment.

The south facade is the result of much later works, since it incorporates constructive elements of the nineteenth and twentieth centuries, with little relation to the original architecture of the palace. In this elevation, the sharp east-west slope is evident.

The building is a total of approximately 30 metres wide, more than 6 taken up by the terrace, its mean height reaching 22 metres. The side units are identical in compositional terms as part of the principal body of the building, differentiated only by the closed baseplate on the west, because of the slope of the street. The towers stand out in both, topped by slate spires.

The building has a central access on the north façade, from the terrace, accessed over a previous staircase; that same terrace gives access through doors to the ground floor of the two towers. There is a further central access on the southern façade, from where stairways lead to the ground floor or to the semi-basement which has its own entrance on this side.

In the central bay, the ground floor has a maximum interior free height of 3.47 metres; the first floor, double height, reaches 8.36 metres; and the third 4.55 metres. The second floor comprises the bodies of the towers.

The information on this aspect in these Technical Specifications is completed by that included in section 2.6. of the Programme of Architectural Requirements which is to be furnished to the eight finalist bidders in this competition.

2.2.5. Archaeological interest

The building and its site are of archaeological interest given their location in the centre of the city, although they seem to bear no significant archaeological load, as is clear from studies made, and their interpretation, dealt with more comprehensively in section 2.7 of the Programme of Architectural Requirements and in its Archaeological Report, which will be furnished in the second phase of this competition, and which set out the conclusions on the actions foreseen in the archaeological action programme approved in an 8 September 2009 resolution (Ref. SGPPH/SVA; N/Expte.61/09) of the Ministry of Culture's Fine Arts and Cultural Assets Directorate-General.

Probes have detected filling on the SW corner, possibly for levelling, using sand, brick, fragments of stone and mortar, little compacted, to 3 metres below the level of Méndez Núñez Street. Under this, polished concrete flooring and a hollow space, to -4.5, which may be for a gallery or collector, and under this a very black, thin level and limey and clayey sands down to -20.40 metres. Under the main salon, fill was detected down to -1.50, and from there geological substrate.

On the NW corner of the terrace, whose final level would be the original level of the terrain, while the street was off-set to overcome progressively the unevenness between the Retiro Park and the Paseo del Prado, levels of fill were found to -6.15 metres and, from there, geological substrate interspersed with granite fragments.

2.2.6. State of conservation

The current state of conservation of the building is in general acceptable, notwithstanding the scant material quality of the stonework and the construction methods.

Structural studies seem to suggest that the state of the stone walls is good, despite a lack of homogeneity, not in principle affecting their stability and strength. On the other hand, the horizontal structure is clearly deficient, with strength ratings well below the values required for the use the building will be put to, and according to the current regulations, together with excessive deck deflection and evidence of vibrations.

A major lack of homogeneity is noted throughout the installations, great dispersion of routes and machine rooms, absence of centralised control systems, obsolescent operation and a failure to upgrade to current standards, so that they will have to be replaced completely in any rehabilitation of the building.

Finishes also point to the passage of time and so to wear and a lack of uniformity. The building has remained in the state in was left in after the Army Museum was dismantled, when it was necessary to remove many museum furnishings and elements secured to the architecture, so that the general appearance of the internal spaces is grim.

Further data can be obtained on the geotechnical, geophysical and geological features of the terrain and the current condition of the vertical and horizontal structure and of the installations in section 2.8. of the Programme of Architectural Requirements and remaining Annexes which will be delivered to the eight finalist participants in this competition.

2.2.7. Current uses

At this time, following relocation of the Army Museum facilities and collections to the *Alcázar* in Toledo, the *Salón de Reinos* is empty and unused. It has been opened exceptionally for temporary exhibitions.

2.3. AREAS

The following are the approximate areas of the *Salón de Reinos* in its current state:

AREAS, SALÓN DE REINOS BUILDING (CURRENT STATE)		
	USEFUL AREA	CONSTRUCTED AREA
SEMI-BASEMENT	613.86	840.00
GROUND FLOOR	1,553.84	2,033.07
FIRST FLOOR	1,539.24	1,988.33
SECOND FLOOR (towers)	414.45	1,569.26
THIRD FLOOR	1,269.56	1,492.18
TOTAL AREA	5,390.95	7,922.84

The outer surface of the north terrace, not included in the figures given above, is 952.12 m².

A survey and photographic dossier is attached to these specifications for a better understanding of the building. Finalist participants in the second phase will be provided with complete planimetry in DWG and/or RVT format.

3. JUSTIFICATION AND AIM OF THE ACTION

In 1994, it was agreed by the Board of Trustees of the *Museo Nacional del Prado*, the Museum's management and the Ministry of Culture to set in motion a plan to expand the Museum in order to respond to visitors' growing demands, to have more space to exhibit its valuable collections and to pursue its investigative and pedagogical mission while maintaining the highest levels of quality.

The importance of this decision and the magnitude of the plan to expand and modernise the institution were reflected in an event which had repercussions in cultural, social and political circles: the Parliamentary Accord which was signed in 1995 and upheld by the different ruling political parties over the last two decades made it possible to move forward with the most important expansion in the history of the *Museo Nacional del Prado* and to bring about the Museum's most notable administrative transformation: the change of its legal status from that of an Autonomous Body to that of a Public Body.

Within the framework of that agreement, the government examined the physical expansion needs of the *Museo Nacional del Prado* and decided that the *Salón de Reinos*, which previously housed the Army Museum, would become part of the Prado, while the Army Museum would be moved to the *Alcázar* in Toledo. On 24 July 1997 a Framework Agreement was signed by the Ministry of Defence and the Ministry of Education and Culture for the transfer and financing of the Army Museum, which was supplemented by another agreement dated 8 April 2003.

Under the terms of these agreements, the Army Museum was moved to the *Alcázar* in Toledo. The museum's new location was inaugurated on 19 July 2010, leaving the *Salón de Reinos* vacant and unused.

At this time, the *Salón de Reinos* is available for renovation and conversion to a museum space as part of the *Museo Nacional del Prado*.

Its annexation and inclusion as part of the Prado Museum Campus will mark the culmination of an ambitious project to configure a museistic complex based on the specialisms of the different museum buildings, as defined in the "2005-2008 Action Plan".

This project took on special importance in the "2009-2012 Action Plan" where the foundations were laid for the execution of this project in the section titled "The future in the past: the *Salón de Reinos*" and its main objectives were defined:

- The creation of an exhibit space that would make it possible to expand the collections of the Prado Museum and to develop a special programme of itinerant exhibits to supplement the current one.
- The enrichment of the cultural offering along the Art Promenade by equipping new spaces with a renovated educational and informational offering in relation to the important historical and artistic Prado Museum.
- Increased ability to attract an international audience while making it possible for citizens to enjoy an emblematic space that is part of the Prado Museum Campus.

The first phase of this project, as indicated in the "2009-2012 Action Plan", was undertaken in 2009 with the drafting of the "Master Plan for the Renovation of the *Salón de Reinos*", a technical and operational document in which the condition of the building was diagnosed, the scope and viability of the intention was defined and the contents and conclusions of which were considered in the preparation of the Programme of Architectural Requirements.

MUSEO NACIONAL DEL PRADO

Despite this, due to the economic situation and the budget constraints of the austerity and cost contention policies imposed by the government in recent years, it was not possible until now to embark on the recovery of the *Salón de Reinos* and make it a part of the Prado Museum Campus.

However, the approaching commemoration of the 200th Anniversary of the Prado Museum, which will take place in 2019, considered an event of exceptional public interest in the 49th additional provision of Budget Act 48/2015 of 29 October for the year 2016, pursuant to article 27 of Law 49/2002 on the taxation of non-profit entities and tax incentives for patronage, presents a unique opportunity to undertake this important project based on the principles of social and cultural responsibility and guided by economic austerity pursuant to the financial strategy of the entity devised in the “2013-2016 Action Plan”.

The architectural renovation and museological adaptation of the *Salón de Reinos* and its incorporation into the Prado Museum Campus has become the centrepiece of this important commemorative event, as well as a priority objective and a project that will have significant repercussions both nationally and internationally.

The *Salón de Reinos* offers an alternative to the *Museo Nacional del Prado*, high quality exhibit space for the presentation of certain aspects of its collection and for the development of a special programme of long-term exhibits with a cross-cutting vision of fundamental themes focused on the history and historical heritage of Spain, all of which is a valuable addition to what the Prado Museum currently has to offer.

4. SPECIAL TECHNICAL SPECIFICATIONS

4.1. GENERAL GUIDELINES AND PROGRAMME OF ARCHITECTURAL REQUIREMENTS

Incorporation of the *Salón de Reinos* into the *Museo Nacional del Prado* represents the following:

- A unique opportunity to delve into the joint historic identity of the Buen Retiro Palace and Prado Museum collections.
- An alternative space to complete the deployment of the entire potential of the Prado Museum's collections and activities.
- A space to test a new long-term exhibition model; to broaden the traditional discourse of the Museum with transversal approaches to the history of art, and more complex, open narrations, and offer the chance to establish unprecedented alliances with other national and international institutions and museums.
- To crown development of the Museum's exhibition and display potential and enrich the extraordinary cultural and artistic offer of the Prado-Recoletos axis.

Thus the project must be based on the following main premises:

- To upgrade the entire building for exhibitions and their complementary services, both public and in-house, to create an exhibition area of about 1,600 - 2,500 m².
- To prioritise preferential use of the main bays on the ground and first floors as exhibition spaces (ancient *Sala de Artillería*, *Sala de la Reina*, *Salón de Reinos* y *Sala de Armas*).
- To highlight the historic architecture of the Buen Retiro palace.
- To upgrade the building without increasing the area or excavating basements beyond what may be necessary for architectural or structural reasons. The possibility will however be examined of using the area under the northern terrace level to locate space for the programme of requirements, for example for machine rooms.
- To provide the structure with public access as close as possible to the Villanueva building, facilitating an axis of movement between the two buildings and for visits to both.
- To incorporate direct below-street-level connection with the *Casón del Buen Retiro*; the project must include and budget for this action.
- To avoid duplication of spaces with others already in existence in other buildings in the Prado Museum Campus except when necessary for the centre to function properly. Whenever possible, the integration of services and installations will be valued, to facilitate centralised management and their unified control, notwithstanding possible operational independence.

The activity planned for the *Salón de Reinos* must be governed by the following general criteria for action:

- Respect for the building's historic status, and in particular for the values associated with the original architecture of the Buen Retiro palace.
- Integration and reinterpretation of singular architectonic elements.
- Optimising and taking advantage of uses and movement.
- Guarantee of structural stability and safety.
- Link with the other buildings making up the Prado Museum Campus, and upgrading their urban surroundings.
- To secure maximum levels of accessibility while respecting the fact that this is a historic building.
- To convert the building into a tool for conserving and exhibiting the cultural assets it houses.
- Recuperation of public use.
- Upgrading of the building to current standards.
- Application of criteria of sustainability and energy efficiency.

4.1.1. Respecting the building's historic condition

The *Salón de Reinos* building is, being attached to a state-owned museum, classified as an Asset of Cultural Interest in the terms of Act No. 16/1985, the Spanish Historic Heritage Act.¹ It is protected by the municipal provisions of Madrid City Historic Ensemble, and catalogued in the 1997 Madrid General City Regulation Plan with number 25,806 and the maximum level of protection – Singular – with the application of Norm NZ1 Grade 5.

It must also submit to the Madrid Regional Government's Historic Heritage Act, Act No. 3/2013 of 18 June, and to the remaining applicable legal standards protecting the Historic Heritage, together with the Urban Provisions and other legislation in place in the field of construction.

Likewise, pursuant to Article 6 of that Act No. 16/1985, as a state-owned building for the installation of a state-owned and -managed museum, the rehabilitation project must be endorsed by the Directorate-General of Fine Arts and Cultural Assets, and of Archives and Libraries, following a report from the IPCE (the Spanish Cultural Heritage Institute).

In particular, in the light of its historic status and as permitted by the installation of the new use and its programme requirements, the rehabilitation of the *Salón de Reinos* will seek to apply three basic, fundamental criteria:

- Respect for the singular values of the whole, and the conservation of its construction, spatial and compositional procedures.

¹In 1994, in application of Articles 6b and 60.1 of said Act No. 16/1985, the building was declared an Asset of Cultural Interest, on the basis of its condition as seat of a state-owned museum (the Army Museum), entered in the General Register of Assets of Cultural Interest with code R-I-MU-0000005-00000 in a resolution of 2 March 1994.

- The search for solutions to add value to the preserved architecture of the Buen Retiro Royal Palace, without losing sight of the double historic nature of the building (palace and museum).
- The possibility of reversing any action that interferes with original elements.

In this sense, the intervention must be in accordance with the Act No. 16/1985 on Spanish Historical Heritage, and particularly with its Article 39. Although the contributions of all existing times must be respected, it may be authorized the removal of any of them, provided that the removed parts involved an obvious degradation of the building and their demolition may be necessary to allow a better historical interpretation. The deleted parts must be properly documented.

It must be kept in mind that, according to critical studies and sources contemporaneous with the building's construction, the Buen Retiro Palace combines its limited architectural quality with a high representative capacity, and symbolism, particularly in the case of the space called *Salón de Reinos* (Hall of Realms).

The project must at all events consider how to enhance the different areas, distinguishing the areas of high architectural and symbolic value of those that were added for purely utilitarian reasons. It must be distinguished volumetric and architectonic values from those of a purely decorative nature, which might be reinterpreted, save where expressly indicated in these Specifications and in the Programme of Architectural Requirements and its Annexes.

In any event, any addition, substitution or intervention in structural, construction or decorative elements that involves a substantial alteration of the cultural asset must be argued by the project's creative team and endorsed by the *Museo Nacional del Prado* and the IPCE.

4.1.2. Preserving and integrating singular elements.

The historic study of the *Salón de Reinos*, which will be provided to participants selected in the second phase of this competition, contains the necessary information concerning the parts of the *Salón de Reinos* which require special attention because of their historic character. Consideration as singular elements, which must be studied specifically in the project, will be given to the following: the *Salón de Reinos*, the *Sala de la Reina* (Hall of the Queen) and the *Sala de Armas* (Hall of Arms), the *Escalera de Honor* (Stairway of Honour), the *Sala Árabe* (Arab Hall) and exterior sculptural elements.

Salón de Reinos

The *Salón de Reinos* is the central space, located on the first floor of the building and, given its emblematic value, should be the subject of detailed study on the project

Its paintings can be considered original, notwithstanding numerous paintovers. They must be preserved, respected and restored in line with the associated specific project to be drawn up, alongside the overall rehabilitation referred to in these specifications which must, in any case, ensure that these paintings are protected and conserved.

Sala de la Reina and Sala de Armas

For the *Sala de la Reina*, it is necessary to take into account the following recommendations:

MUSEO NACIONAL DEL PRADO

- Lower level: in the entrances now bricked up and through which there is no passage, it is recommended that at least the doors of the balconies which were once installed be placed there.
- Upper level (at the same height as the second floor): to recover the original layout of the spans in the southern wall, closing the central window of the three adjoining ones on the stairway side.

It is recommended that the same criterion be used for the distribution of the spans in the *Sala de Armas*, to increase the natural lighting.

The paintings in these halls are recent, those in the *Sala de la Reina* dated between 1870 and 1915, as graphically documented, and done by conscript soldiers in the *Sala de Armas*. Probes have revealed underlying decoration which is not very old, poorly conserved and of little quality, making its recovery inadvisable. The vaults in both the *Sala de Armas* and the *Sala de la Reina* must be conserved, even though the latter has been rebuilt with a metallic beam structure.

Escalera de Honor

The historic documentation records the presence of a stairway at this point, although not with the current configuration, whose plaster decoration is from a nineteenth century reconstruction. It is recommended that the project maintain the location of this space, but gives thought to retaining its formal configuration, to the extent that it is or is not wished to keep the building's personality intact following the nineteenth century reform.

This reflection can be applied to other spaces arising from that reform such as the *Sala de Artillería* (Artillery Hall), the *Sala de Caballería* (Cavalry Hall), the Library and the northwest tower and southern façade stairways.

External sculptural elements

Similarly, pursuant to the Madrid PGOU (General Urban Regulation Plan), account must be taken of the protection of the following singular elements linked to this building, all located on the outside:

-No. 25806-1: Headstone

Headstone. Anonymous.

Grade 1 protection (Historic-Artistic). Relocation not permitted.

-No. 40206-1: Battle of Alhucemas

Sculptural group. V. Navarro, 1925.

Grade 2 protection (Historic). Relocation permitted in its surroundings.

-No. 40343-1: Monument to Luis I

Statue. Andrés de los Elgueros, 1749-1750.

Grade 1 protection (Historic-Artistic). Relocation permitted.

-No. 40344-1: Monument to Felipe IV

Statue. Luis Salvador Carmona, 1749-1750.

Grade 1 protection (Historic-Artistic). Relocation permitted.

-No. 40346-1: Monument to the King of Castile or León

Statue. Anonymous, 1749-1750.

Grade 1 protection (Historic-Artistic). Relocation permitted.

MUSEO NACIONAL DEL PRADO

-No. 40347-1: Monument to a king
Statue. Anonymous, 1749-1750.
Grade 1 protection (Historic-Artistic). Relocation permitted.

-No. 40348-1: Monument to a king
Statue. Anonymous, 1749-1750.
Grade 1 protection (Historic-Artistic). Relocation permitted.

The project must consider actions on the architectonic elements forming part of the construction system of the *Salón de Reinos*: doorways, windows, cornices, dressings in hollows, stairways, balustrades, spires, paving, etc. which will be the object of specific actions to eliminate, recuperate, restore or enhance, duly justified and incorporated into the project arising from this competition.

The project must include the necessary economic items for the restoration of these singular elements, for their eventual transfer to other locations, or for their demolition, if the project considers desirable this question and current legislation allows it. However, as pointed out, the project will not deal with the restoration of the paintings in the *Salón de Reinos*, which will be the subject of a specific separate project.

Likewise, the project must allow for sufficient provision so that any singular element of historic or heritage significance discovered while the work is being done can be conserved *in situ*, in the same conditions as cited above.

4.1.3. Treatment of the building as containing and as a means for the conservation of the cultural assets it will house.

The aim of the rehabilitation of the *Salón de Reinos* is, in addition to recuperation and enhancement of the building's architectural singularity, to convert it into an instrument for the conservation and exhibition of works of art and a new support for the *Museo Nacional del Prado*'s cultural offer. To meet this triple end, the project must meet the following requisites:

- To optimise the building's inherent conditions as a historic building composed of structures of high thermal inertia, for the conservation of cultural assets.
- Strict control of the climatic conditions in the building, particularly in all areas containing collections or singular architectural elements, so that constants of relative humidity, temperature and air quality appropriate for the demands put in place can be maintained. Thus the building's thermal response must be examined and enhanced, projecting the necessary air conditioning installations, and including these installations in the building without prejudicing its historic values. The prevailing criterion in the choice of materials and finishes and in the design of systems and installations must be such as to guarantee their maintenance at the lowest cost, and improved use and operation of this museum institution.
- Strict control of lighting so that both light levels and light quality are appropriate to the conservation and exhibition of the collections. Thus careful attention must be paid to the current natural lighting conditions, and regulation mechanisms put in place to enable them to be controlled. Moreover, adjustable and versatile artificial lighting installations must be projected that are adapted to the lighting levels required by each space and by each individual work.

- To secure the best security conditions for both collections and for visitors/users and the staff posted there, so that not just the building's structure itself but also its layout, materials and installations prevent and minimise risk of theft, fire, flooding, vibration or any other threat.

4.1.4. Treating the building as a public cultural centre

To recover public and cultural use in the *Salón de Reinos* it will necessary, in addition to the internal services required, many of them destined for the reception of visitors and the creation of relations between them, to provide the following: information points, ticket sales, rest areas, cloakroom, shops, toilets, educational workshop, multi-use hall, exhibition halls, etc. Account must be taken in all these spaces of the different commitments these uses are subjected to.

Timetable difference is one of the fundamental questions to be dealt with. The possibility must be ensured of operating the various services at different times. The simultaneous functioning of public and internal activities must also be guaranteed.

It is essential that consideration be given to the need for the independent operation of spaces which are given over on the museum's various floors to exhibition uses, to allow the assembly as necessary of several simultaneous exhibitions. Likewise, the project must allow the museum to function normally even if part of the exhibition space is not in use, because there is no exhibition or because an exhibition is being mounted.

The project must consider public numbers which may in some cases be high, and must guarantee the strength of the building's existing structure.

Account must be taken of the representative nature which must be offered by some public spaces, such as the reception area and, in any event, that of the historic spaces themselves.

4.1.5. Compliance with accessibility standards

The action to be taken in the *Salón de Reinos* must be designed to allow complete accessibility for anyone, irrespective of their physical condition, to any of its component spaces, as far as possible encouraging the same public routes for all; however, this decision must prioritise respect for the building and the possibility of access to the spaces over maintaining a single route for the whole public.

Where the building's spatial and historic configuration makes it impossible to eliminate architectural barriers, alternative means must be provided which allow access to or at least contemplation of these spaces by those with motor disability. Distribution of uses will take account of the less accessible areas of services which might draw less public.

Correct movement must be guaranteed between the building's different levels for persons, cultural assets, equipment and supplies, with elevators and service lifts, as far as possible eliminating or reducing unevenness on one floor. Irrespective of other communication systems planned, it will be essential to install at least one elevator-service lift vertically and continuously connecting all floors.

4.1.6. Applying sustainability criteria

The project must seek to apply sustainable development criteria. The overriding criterion in selecting materials, finishes and designing of systems and installations must be such as to guarantee less cost

of subsequent maintenance and enhanced use and operation of the museum institution, especially in relation to the preventive conservation of the collections, within the context of respect for the historic character of the building, and in harmony with it.

Action in the *Salón de Reinos* must uphold the philosophy of involvement with the environment that the *Museo Nacional del Prado* has committed itself to, the first Spanish museum entered in the Register of carbon footprint, compensation and absorption projects, with the aim of minimising the impact of its activity and so reduce greenhouse gas emission.

As far as possible:

- To increase the building's thermal inertia and improve its intrinsic insulation, at the same time facilitating its "breathability".
- To orientate the largest possible number of spaces with high energy requirements favourably, according to the planned use.
- To the extent that the regulations on the protection of the Historic Heritage allow, to study use of sunlight and its benefit according to seasons and the time of day.
- To create crossed ventilation.
- To favour the integration of alternative energy sources such as solar thermal collectors for hot water.
- To use high-energy-efficiency technologies.
- To avoid unnecessary automation.
- To review financial and constructive economy and efficiency while work is under way.

4.1.7. The building's surroundings

The project must study the building in relation to its surroundings and consider the visual link of the *Salón de Reinos* with the monumental buildings around it.

On the other hand, it must define precisely the areas for loading and unloading cultural assets and merchandise, studying vehicle flows and movement around the museum, the possibility for HGVs to access and park in front of or close to the museum, accessibility from public transport stops and aspects such as lowering footpaths and an absence of obstacles.

Particular attention must be paid to the relation of the *Salón de Reinos* with the Villanueva/Jerónimos buildings, with which a communication trunk must be considered that facilitates movement between the two buildings and most particularly with the *Casón del Buen Retiro*, to which a possible direct, below-street-level link, for internal use, must be considered.

The project budget must include any charges for managing these questions and the team awarded its drafting must take on board any formalities or the drafting of documents related to urban development which may be necessary or are required by Madrid City Corporation.

4.1.8. Access and movement

The proper functioning of the *Salón de Reinos* building as a museum depends to a large extent on the correct configuration of accesses and the internal movement of both persons and objects. A definition of the main routes must guarantee rational and optimal use of the space, avoiding

interference between movements of various types of user/object, ensuring maximum ease of connection and complying with safety requirements in place. With a view to optimising this aspect, the Programme of Architectural Requirements which will be delivered to participants entering the second phase of the competition includes a set of flowcharts listing the spaces each element in transit may travel through on its route.

Accesses and exits

There must be several outside accesses into the museum. Their number, location and characteristics depend on the specific needs of the elements in transit and the times set for their movement. The project must necessarily define the main access and that from the pickup area, as the functioning of the entire Public Area depends on that.

The following accesses have been considered necessary:

Two-way accesses (entrance and exit)

- 1. General public access
- 2. Group access
- 3. Staff access
- 4. Access for materials and supplies
- 5. Access for artworks

One-way accesses (entrance or exit only)

- 6. Food access
- 7. Access for waste removal

Attempts will in any case be made to physically differentiate all these accesses, although it must be remembered that at this time the *Salón de Reinos* has just five entrance-exit doors around its external perimeter. It is likely that, being a historic building, for heritage or architectural questions, no further entrances can be made, in which case the necessary routes must be organised in the most convenient way for the flows referred to above to operate correctly. It would be best for the main public reception area to be located in such a way as to enhance the pedestrian communication axis with the Villanueva and Jerónimos buildings and the *Casón del Buen Retiro*.

It will in any event be necessary to distinguish the entrances for the public, staff, supplies, works of art and waste.

- Access for persons. These must be as easy to use and as simple as possible. Their design must take the following user categories into account:
 1. User/Client: those who come occasionally to the museum to consume a product or use a service without needing to acquire a ticket and visit the exhibition spaces.
 2. Visitor: those who enter the museum and go to the exhibition or join in informative and educational activities, having bought a ticket and going through access control, accessing individually or in a group.
 3. Researcher /Collaborator: the name given to those who come to the Museum occasionally to use the internal spaces in the pursuit of a variety of activities.
 4. Protocol: visits of an official and representative nature.
 5. Staff: employees from both the Museum and outside companies.

- Access for artworks. If possible, vehicles will be loaded and unloaded inside the building and behind closed doors. Should this not be feasible because of the building's historic status and urban location, vehicle parking points will be studied, with a view to eliminating or minimising the collections' exposure.

The artworks entrance must take account of the considerable width of some pieces which may be exhibited in this building. This access for collections must be as close as possible to the area for the reception of cultural assets and the painting hoists (*montacudros*).

Movement of works of art must as far as possible be separate from all public movement so that cultural assets can be transferred during public opening hours without interfering with visits.

There must be no unevenness or steps on the accesses for cultural assets and, if possible, no ramps.

- Access for goods and supplies. Access for supplies must be separate from that for persons and artworks, and thought must be given as to how to allow vehicles to park without affecting traffic in public thoroughfares.

The *Salón de Reinos* – *Casón del Buen Retiro* Link

The project arising from this competition must provide for a direct, underground link between the *Salón de Reinos* and the *Casón del Buen Retiro*, for internal use, connecting some point in the *Salón de Reinos* basement with one on the north side of basement -2 of the *Casón*. This communication must follow the most direct and shortest route possible. The project must include and budget for all the actions necessary for this to be implemented, including any possible studies or legal formalities needed.

4.1.9. Security and access controls for persons

Security is one of the major concerns in a building of these characteristics.

The design of the security system must address the functioning of the institution as a whole, its internal and external relations among the buildings making up the *Museo Nacional del Prado*, and remember that the building's control facilities must be connected to the main Museum ones.

Systems and measures must be designed to protect internal Staff, visitors and users as well as the collections and the historic building itself, understood not just as an asset to be conserved but also as the primary physical element of security.

There must be no general scale of priorities, although it might be created depending on the different types of risk. Clearly the risk of theft affects only the assets, while fire is a risk for the entire building and its occupants, whether persons or objects. It must also be remembered that, in certain conditions, some elements may affect others. In the extreme cases, naturally, persons must take priority over objects.

Security zones

The following security zones must be defined:

- Internal zones with collections, with maximum security closures and controlled entrances. A distinction must be made between zones with collections at rest and those admitting collections in movement. Anti-fire security must be at maximum level, especially in areas where cultural assets are received and in the urgent intervention hall where inflammable materials are handled.
- Public zones with collections on display. It must be possible to control access to these areas. These spaces must when necessary be able to be isolated from areas of free access, especially at times when other museum services are operating (shops, the all-purpose hall, etc.) but the exhibition halls are closed.

Collections need a maximum level of protection as they are exposed to the public. Halls must be arranged to avoid excessive possible subdivisions as far as possible, to facilitate surveillance.

Fire security must be at the maximum level, given the combination of a large public presence and the collections.

In this zone, security measures must be extreme but at the same time subtle, discreet, not distorting the visitor-object relation.

- Internal zones without collections: There must be controls on access and at least the fire security levels demanded for work spaces.
- Public zones without collections: access is free and undifferentiated for the public, the fire security levels at least those required in the current provisions for public premises. Security in these spaces must focus on enhancing the sensation of comfort and protection.
- The building perimeter and its surroundings. The building's external perimeter must act as a first security cordon for the collections, and must at the same time be protected from vandalism the surveillance systems permitted by law, and adequate lighting.

Grades of accessibility of persons to the museum spaces

The following grades of accessibility of persons are considered in defining the museum's spaces:

GRADE I: Maximum accessibility: for all persons, no access control.

GRADE II: General accessibility: for all persons following access control. The user/client is therefore excluded.

GRADE III: Restricted accessibility: spaces accessible only to those with Researcher/ Collaborator, Protocol and Staff classification, after access control.

GRADE IV: Minimum accessibility: access solely for museum Staff, through an access control system.

4.1.10. Considerations concerning installations

The current state actual of the installations in the *Salón de Reinos* is not adequate for the future use intended for the building and does not comply with current provisions, so that the project elaborated as a result of this competition must address their overall replacement.

The project must include all the necessary calculations and technical annexes; the winner must deal with the formalities and documents required to legalise all the museum's installations, including the

MUSEO NACIONAL DEL PRADO

machine rooms. The resulting projects must be endorsed by authorised technicians and registered with Industry for approval.

Likewise, because the *Salón de Reinos* is a historic building of great heritage value, particular attention must be paid to avoiding the physical aggression which may arise from lines laid for the installations in a historic building.

In any case, the indications set out in section 4.5. of the Programme of Architectural Requirements to be delivered to the eight finalist participants in this competition will be followed relative to the electrical, lighting, lightning conductor, TV and FM, elevators and painting hoist, air conditioning, fire-fighting security and anti-intrusion, telephony, public address and interphone installations, the main aspects of some of which are highlighted:

Electricity

The installation will provide for normal supply and complementary or security supply in a twin high-voltage connection, the two supplies from independent distribution rings.

The project must examine the possibility of the *Salón de Reinos* using the existing transformer facility in the *Casón del Buen Retiro*, property of the *Museo Nacional del Prado*, introducing the necessary modifications and ducting. If not possible, provision must be made in the *Salón de Reinos* for a transformer centre owned by and for the exclusive use of the Museum, in an independent space which may not be used to access other services; similarly, a sectioning centre with direct access from outside must be planned.

Lighting

LED technology will be used preferably, except where necessary for technical reasons.

Different lighting levels must be considered for surveillance, maintenance, medium use and full use. All lighting circuits must be controllable from a lighting management system integrated into the Museum's general lighting management system, incorporating all necessary sectoring.

Air conditioning

The air conditioning installation planned must enable measurement and control of the different parameters using an open management system which must be integrated into the Museum's existing management system: relative humidity and air temperature, CO₂, high-efficiency particle and gas filtration (accessible for maintenance), in any event taking account of the peculiarities of Madrid city's climate.

The installation must be able to reach a range of 45-55% HR and 18-24° C, although it must in general be held at 50-55% Hr and 20-22° C.

It will be kept in mind that in all areas containing cultural assets, the air conditioning must operate round the clock; in those without these elements, the air conditioning will be used exclusively at public opening times or during museum Staff's working hours.

The possibility must be considered of reaching specific values when necessary for the exhibition of singular works needing this, by establishing special or specific environmental control measures, to be defined in due course with the implementation of the museographic project, which is not the subject of these specifications.

The environmental monitoring system must allow for real-time supervision of relative humidity and temperature values in exhibition halls and their adjacent services where there is a collection.

4.1.11. The building's structure

The project resulting from this competition must take account of the structural indications set out in the Programme of Architectural Requirements to be delivered in the second phase. The proposals in that programme do not release the project's author from detailed study of them, and do not limit them in developing any other solution better adjusted to the requirements of the future action.

Independent of the adequacy of the solutions arising in this document, the final project design must necessarily take account, and without limitation, of the definition of the technical solution that addresses the true state of the foundations and structure, the maximum permissible values for differential settlements depending on the particular features of the walls and decks, and the geotechnical characteristics of the terrain.

The necessary trials must be run to define foundation and structure. Specifically, for all structural and construction elements made of wood, the absence must be guaranteed of xylophages or other pests that impair their resistant capacity, addressing their removal (and replacement where applicable) in the project.

Vertical structure

The strength results in trials run on the existing walls, and visual inspection, seem to suggest that they might be used in the building's new conditions of use.

The building's grade of protection recommends that the current façade walls be used, provided that their detailed study does not contradict that. The protection of interior walls does not affect their conservation equally; while they do appear also to be in condition to comply with the strengths needed for the new load situation, they may not prove appropriate for the museum's functionality, so that the project must address their conservation, replacement or removal.

Intermediate floor decking

While no significant pathologies are to be seen in the existing decks (except for the roof), there are other strength and functional considerations which must be accounted for in action on this structure designed to meet the needs arising from the new use.

While the *Salón de Reinos* satisfactorily fulfilled its role as a museum assigned to it until 2009, the overload requisites for the future use in most of its area, and the more than appreciable sensation of insecurity caused by the vibration of the existing decks when simply walking on them, makes it necessary to act on them. These elements can be replaced only if the integrity of structural elements (façades, heights, etc.) and non-structural elements (ornamentation, paintings, etc.) to be conserved is not compromised.

Roof

The roof's current state of deterioration also suggests that its complete replacement must be examined.

4.1.12. Materials and finishes

Materials and finishes planned for facings, paving, roofing, etc., must not just fulfil conditions of respect for the building set out above, but also guarantee durability, the safety of persons and collections, and ease of maintenance.

4.1.13. Visit indicators

The project arising from these Specifications must take the forecast visitor figure as its main indicator for dimensioning spaces, uses and services, together with the building's reception capacity, matters detailed in section 4.1.1.1. of the Programme of Architectural Requirements: based on an understanding of the conduct of the public in the Prado National Museum and other like institutions, and an analysis of the standards applicable in the matter of the occupancy of public spaces, a forecast has been made of visitors to the *Salón de Reinos*.

With an analysis of visiting habits in the *Museo Nacional del Prado*, it can be suggested that visitor projection to the *Salón de Reinos* will be 500,000 per annum, with possible fluctuations, depending on the exhibition schedule, of $\pm 200,000$.

4.1.14. Other physical indicators

Apart from the foregoing, the project must take account of other indicators affecting different areas of the Museum's operation, making it possible to dimension the spaces and services required for the correct implementation of the suggested functional programme.

TYPE OF INDICATOR	NAME	VALUES
	Minimum span dimensions	4.5 m x 4 m
	Picture hoist measurements	Door: 4.50 x 4 m Cab: 4.50 m high x 7.5 m wide x 4.60 deep. Load: 9000 Kg.
	Truck measurements	4.07 m x 2.55 m x 16.50 m long
Public Indicators	Physical reception capacity	500,000 ($\pm 200,000$) visitors/annum
	All-purpose hall capacity	120 seats
	Cafeteria-restaurant capacity ²	Public area: 180 m ² /1.5 m ² = 120 persons Internal area: 30 m ² /10 m ² = 3 persons
	Shop-bookshop capacity	50
	No. of tickets sold per ticket office per hour	54
	No. of persons educational workshop groups	25-30
	Scanner visitor numbers	138-193 per hour

The indicators are classified into two categories: Cultural asset indicators and Public indicators. The former detail aspects which must be taken into account in creating the space destined to cultural assets, such as overload, span measurements, etc. On the other hand, the latter are intended to estimate the public that will visit the museum and so to evaluate the spaces required.

These indicators are by way of guidelines, designed to foresee extreme situations which may arise and which must be provided for and evaluated in the project.

² According to CTE-DB-SI – Safety in case of fire.

4.2. FUNCTIONAL PROGRAMME

The Programme of Architectural Requirements drawn up by the *Museo Nacional del Prado* for the *Salón de Reinos*, to be handed over during the second phase of the competition, sets out in detail the Functional Programme, summarised below.

Provided that the functional necessities in that document are met, the project's authors may present the proposals for distribution and the spatial solutions they deem fit, and the selection of materials considered to be adequate for the best operation of their design.

The proposal for distribution of the spaces in this building is based on a functional distinction responding to two main criteria:

- the relation of spaces to cultural assets: whether or not containing collections, this circumstance imposes specific conditions of environment and security requisites.
- the relation of spaces to users: public or internal activities, the presence of public also imposing its requirements in questions of climatic comfort and making greater security measures necessary.

Once inter-crossed, these two criteria basically configure four types of areas:

- Public Area without Collections.
- Public Area with Collections.
- Internal Area with Collections.
- Internal Area without Collections.

Each comprises a set of specific services with particular conditions, determined by user type and the presence or otherwise of cultural assets. This categorisation by areas does not mean that the spaces must be grouped physically in the same part of the building, but that their requirements are alike.

The Programme of Architectural Requirements classifies the functional spaces needed, organising them according to those areas, and includes a description and information for each on movements and degrees of accessibility, dimensions, adjacent spaces, accesses, classification by area, allocation by use and functional area, and the observations needed for the design of the space concerned.

These indications must be studied by participants who may nonetheless propose duly justified alternative adjustments. The areas proposed are thus estimates and will be defined while drafting the associated Preliminary Project and Basic Project.

The final floor space depends on the specific characteristics of the project. It could be lower than the floor space currently offered by the building if the final solution gives more importance to the enhancement of the XVII century palace, over other issues. It could be slightly higher than the floor space that currently presents the *Salón de Reinos*, if the final solution, for example, proposes the excavation of the north terrace for locating any use or servant space.

4.2.1. Public Area with Collections

Exhibition halls

- Area: **1,600 - 2,500** m²
- Minimum height: 4.5 m.
- Movements:
 - Persons: Visitors; Researchers/Collaborators; Protocol; Staff.
 - Purposes: Works of art; museographic-support material.
- Degree of accessibility: Grade II: General accessibility.
- Public access and exit from the reception area.
- Access exclusively for movement of works of art.
- Environmental conditions regulable, to be adapted to the requirements of the pieces.
- Electrical connections in floors, ceiling and walls.
- Sectioning of installations.
- Preferential evaluation will be given to the location of the exhibition spaces in the three main galleries superimposed on the ground, first and third floors of the *Salón de Reinos*.
- Possible independent operation of the exhibition spaces located on the different floors.

4.2.2. Public Area without Collections

Reception area

- Area: **170 - 220** m²
- Two zones: free and controlled movement (with access control and security; audio-guide counter and group guides, spaces for directories and a seating area).
- Movements:
Persons: Users/Clients; Visitor; Protocol.
- Degree of accessibility: Grade I: Maximum accessibility.
- Adjacent spaces: ticket offices, cloakroom, group service office, visitor service store.
- Access from outside.
- An open space, visually attractive and logically organised for users.
- Surfaces and floors resistant to public use and with minimum sound diffusion and reverberation.

Group reception area

- Area: **± 50** m²
- With a group service counter and cloakroom.
- Movements:
Persons: Visitors in groups; Staff.
- Degree of accessibility: Grade II: General accessibility.
- Adjacent spaces: public toilets.
- Direct connection with reception area and ticket offices.
- Close to exhibition halls and educational workshops.
- Designed to receive a group every half hour.
- Spaces inside for group cloakrooms.

Toilets

- Total area: **120 - 140** m²
- Ladies' public toilets will have a small vestibule, a washbasin zone, an area of cubicles, baby-changing facilities and a small room for cleaning material.
- Men's public toilets will have a small vestibule, a washbasin zone, an area of cubicles, an area for urinals, baby-changing facilities and a small room for cleaning material.
- Movements:
Persons: Users/Clients; Visitors; Researchers/Collaborators; Protocol; Staff.
- Degree of accessibility: Grade I: Maximum accessibility.
- Public toilets close to the reception area, exhibition halls and the all-purpose hall.
- Internal toilets close to offices, maintenance workshops, ECA and staff rest hall.
- It must be ensured that there are toilets for the all-purpose hall, the educational workshops and other spaces functioning independently of the exhibition halls.

Cafeteria-restaurant

- Area: **150 - 200** m²
- Bar and table areas.
- A space as flexible as possible, able to be modulated according to visitor flow, the visitor calendar and assignment of spaces.
- Located close to the visitors exit.
- Possible access to an outdoor terrace.
- Movements:
 - Persons: Users/Clients Visitors; Staff.
 - Purposes: Food; restaurant supplies; restaurant waste.
- Degree of accessibility: Grade I: Maximum accessibility.
- Adjacent spaces: Kitchen, food storeroom, refrigeration chambers, rubbish room, public toilets, changing facilities, office of the cafeteria-restaurant head.
- Public access from the reception area; if possible, free access from outside or without passing through access control.
- Individual meters making it possible to monitor specific consumption in this space.

Cloakroom

- Area: **35 - 40** m²
- Space with a service counter and storage zone, and independent space for self-managed lockers.
- Movements:
 - Persons: Visitors; Staff.
- Degree of accessibility: Grade II: General accessibility.
- A single access from the reception area, after the control point and scanner.
- Suitable configuration and division between reception and return areas.
- Proximity to exhibition halls, public toilets, the shop-bookshop and the cafeteria-restaurant.

Breast-feeding hall

- Area: **± 10** m²
- Fitted with a basin and changer, a place to sit, a microwave working space, exclusive toilet with washbasin and lavatory and a place to leave the pram.
- Movements:
 - Persons: Visitors.
- Degree of accessibility: Grade II: General accessibility.
- A single access from a public area with no collections.
- Proximity to the Reception Area and Exhibition Halls.
- An intimate, welcoming space.

Protocol Hall

- Area: ± 40 m²
- For official meetings.
- Movements:
 - Persons: Protocol; Staff.
 - Purposes: Food.
- Degree of accessibility: Grade III: Restricted accessibility.
- A single access from a public area with no collections.
- Direct connection with the Protocol Office.
- Proximity to the Reception Area; Vestibule for Staff and visits; Cafeteria-restaurant kitchen.
- A versatile, representative space.

All-purpose hall

- Area: **120 - 160** m²
- Number of seats: 120.
- For multi-purpose use and various types of activities, complementary or otherwise to the visit to the museum (lectures, concerts, courses ...).
- With an area of seats for the public and a raised podium area.
- Movements:
 - Persons: Users/Clients; Visitors; Researchers/Collaborators; Protocol; Staff.
- Degree of accessibility: Grade I: Maximum accessibility.
- Adjacent spaces: Projection cubicle, translation cubicle, dressing room and store.
- Access from the Reception Area, without buying a ticket or passing through access control.
- Proximity to public toilets.
- Stage dimensions sufficient for a chamber music concert, with piano, or a staging with a number of actors.
- Good acoustics and good acoustic insulation.
- Flexible lighting.

Educational workshops

- Area: ± 50 m²
- A wet and a dry zone.
- Movements:
 - Persons: Visitors; Staff.
- Degree of accessibility: Grade II: General accessibility.
- Adjacent spaces: Public toilets, education storeroom.
- Access in the Public Area without collections.
- Proximity to Exhibition halls and Group Reception Area.
- Floors and surfaces of easy to clean and repair resistant materials.

Ticket offices

- Area: ± 20 m²
- 4 sales outlets.
- A sales area and space for communication server.
- Movements:
Persons: Visitors; Staff
- Degree of accessibility: Grade II: General accessibility.
- Access from outside or from the free transit zone in the Reception Area.
- Internal access for Staff from the Internal Area without collections, through a security door.
- Direct connection with the Reception Area and Group Reception Area.
- If communicating with the outside, there must be provision for elements to protect from inclement weather.

Shop-bookshop

- Area: **70 - 100** m²
- Zone for display of articles, and sales counter.
- This space will be as flexible as possible, able to be modulated according to visitor flow, the visitor schedule and assignment of spaces.
- Located close to the visitors exit.
- Possible external display window.
- Movements:
Persons: Users/Clients; Visitors; Staff.
Purposes: Shop-supplies; Shop-waste.
- Degree of accessibility: Grade I: Maximum accessibility.
- Adjacent spaces: Shop office, Shop store, Changing facilities.
- The possibility will be studied of installing a sales point on floors other than the one where the shop's main space is located, each with their installation take-offs and associated storage.

4.2.3. Internal Area with Collections

Packaging Store

- Area: **30 - 40** m²
- Two areas: own packaging zone; temporary exhibition packaging zone.
- Movements:
 - Persons: Staff.
 - Purposes: Museographic-packaging material.
- Degree of accessibility: Grade IV: Minimum accessibility.
- Access from the Internal Area with collections, either from the Loading dock, from the Distribution zone, or directly from the Unpacking hall.
- Direct connection with the Unpacking hall.
- Large, open transit spaces.
- Resistant flooring and surfaces.

Painting hoist

- Area: \pm **30** m²
- Door dimensions: 4.50 x 4 m.
- Cubicle dimensions: 4.50 m high x 7.5 m wide x 4.60 deep.
- Load: 9,000 kg.
- Movements:
 - Persons: Staff.
 - Purposes: Works of art; Museographic-packaging material.
- Degree of accessibility: Grade IV: Minimum accessibility.
- An access on each floor and at the Loading dock.
- Direct connection with the Unpacking hall, Exhibition halls, Insect pest protection hall, Emergency restoration workshop.

Loading and unloading dock

- Area: **80 - 100** m²
- A loading and unloading space fitted as applicable with an elevator platform and block and tackle and including a security control post with scanner.
- Movements:
 - Persons: Staff.
 - Purposes: Museographic-packaging material.
- Degree of accessibility: Grade IV: Minimum accessibility.
- Adjacent spaces: Unpacking hall, Insect pest protection hall, Packaging store.
- Directly communicating with the Painting Hoist.
- Vehicle access from outside.
- Flat, even, resistant flooring, suitable for vehicle traffic.

Insect pest protection hall

- Area: ± 20 m²
- Minimum height: 4,5 m.
- Overload: 1,000 Kg/m²
- Movements:
 - Persons: Staff.
 - Purposes: Works of art.
- Degree of accessibility: Grade IV: Minimum accessibility.
- Access from the Internal Area with collections, either from the Loading dock or from the Distribution zone.
- Direct connection with the Packaging store.
- A large-dimensioned door (4 x 4.5 m), no unevenness, double or insulated, to favour indoor climatic stability.
- Direct input of outside air must be avoided.

Packaging and unpacking hall

- Area: **25 - 30** m²
- Minimum height: 5 m.
- Overload: 1,000 Kg/m²
- Movements:
 - Persons: Staff.
 - Purposes: Works of art; Museographic-packaging material.
- Degree of accessibility: Grade IV: Minimum accessibility.
- Access from the Internal Area with collections, either from the Loading dock or from the Distribution zone.
- A large-dimensioned door (4 x 4.5 m), no unevenness, double or insulated, to favour indoor climatic stability.

Cultural Assets reserve hall

- Area: **270 - 400** m²
- Minimum height: 4,5 m.
- Overload: 1,000 kg/m²
- Movements:
 - Persons: Staff; Researchers/Collaborators
 - Purposes: Works of art; Museographic material/Supports
- Degree of accessibility: Grade III: Restricted accessibility
- Access through a double door from the Internal Area with collections.
- Direct connection with the Loading dock or Painting hoist.
- Proximity to the Emergency restoration workshop and Exhibition halls.
- Finishes resistant and easy to clean.

Cultural Assets transit hall

- Area: **25 - 30** m²
- Minimum height: 4.5 m
- Movements:
 - Persons: Staff; Researchers/Collaborators
 - Purposes: Works of art
- Degree of accessibility: Grade III: Restricted accessibility
- Access from the Internal Area with collections.
- Direct connection with the Loading dock or Painting hoist.
- Security door with access control.

Emergency restoration workshop

- Area: **25 - 30** m²
- Two zones: work station with computer and an open working zone.
- Minimum height: 5 m
- Overload: 1,000 Kg/m²
- Movements:
 - Persons: Staff; Researchers/Collaborators.
 - Purposes: Works of art; Museum-waste.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single access, with security door.
- Direct access from the Painting hoist.
- A large-dimensioned door (4 x 4.5 m), no unevenness.
- Floors and surfaces of resistant materials, easy to clean and repair.

4.2.4. Internal Area without Collections

Storerooms

- The following independent storerooms must be provided for, preferably located in the same zone, and with the following areas:
 - Visitor service storeroom: ± 4 m²
 - Education storeroom: ± 4 m²
 - Security elements storeroom: ± 4 m²
 - Filter storeroom: ± 4 m²
 - IT storeroom: ± 4 m²
 - Gardening storeroom: ± 4 m²
 - Cleaning storeroom: ± 4 m²
 - Maintenance storeroom: ± 30 m²
 - Security maintenance storeroom: **8 - 10** m²
 - Artwork Brigade material storeroom: **8 - 10** m²
 - Office material storeroom: ± 4 m²
 - Inflammable material storeroom: ± 4 m²
 - Inventoriable material storeroom: ± 20 m²
 - Museographic material storeroom: **30 - 40** m²
 - All-purpose hall storeroom: **8 - 10** m²
 - Shop-bookshop storeroom: **8 - 10** m²
 - Machinery parking: **8 - 10** m²
- Movements:
 - Persons: Staff.
 - Purposes: Museum-supplies; Museographic-packaging material .
- Degree of accessibility: Grade IV: Minimum accessibility.
- Access from the Internal Area without collections.
- Proximity to the garbage room and the supplies loading and unloading area.
- Floors and surfaces in resistant materials, easy to clean and repair.
- Possibility for palletised loads.
- System of access control.

All-purpose hall projection cubicle

- Area: **5 - 6** m²
- Movements:
 - Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- If possible, access from the Internal Area with no collections.
- Direct connection with the All-purpose hall.
- Adjustable air conditioning.
- Takeoffs for current, voice and data, and prepared for multimedia equipment connection.
- Wireless communication system between all the All-purpose hall spaces.

All-purpose hall translation cubicle

- Area: 5 - 6 m²
- Movements:
Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- If possible, access from the Internal Area with no collections.
- Wireless communication system between all the All-purpose hall spaces.
- Maximum interior and exterior acoustic insulation.

Cafeteria-restaurant refrigeration chamber

- Area: ± 5 m²
- Movements:
Persons: Staff.
Purposes: Food.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single access from the Internal Cafeteria-restaurant Area.
- Proximity to the supply access zone.
- Inside finish washable using disinfectant products.

Dressing room

- Area: 5 - 6 m²
- Two zones: sanitary zone with toilet and shower; rest zone.
- Movements:
Persons: Researcher/collaborator.
- Degree of accessibility: Grade III: Restricted accessibility.
- Access from the Internal Area without collections.
- Close to the All-purpose hall.

Data access and transmission centre

- Area: 8 - 10 m²
- Movements:
Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- Connected to the communications cabinets to be located on.
- Away from zones with risk of flooding, climatic contrast or electromagnetic radiation.
- A single access with a security door.

Cafeteria-restaurant kitchen

- Area: **25 - 30** m²
- Distributed into: Cold kitchen, hot kitchen, dessert zone, dishwashing zone, garbage area.
- Movements:
 - Persons: Staff.
 - Purposes: Food: Restaurant-waste.
- Degree of accessibility: Grade IV: Minimum accessibility.
- One access from the Internal Area with no collections.
- Direct access from the public area of the Cafeteria-restaurant.
- Direct connection with the Refrigeration chamber, Garbage room and Food storeroom.
- Proximity to supplies access and the Protocol Hall Office.
- Provision must be made for storing prepared food overnight.
- Finishing materials permitting continuous washing using disinfectant products.

Gatehouse

- Area: **± 20** m²
- Comprising the Supervisor's Office, General Supervisor's Office and Surveillance Head's Office.
- Movements:
 - Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single access from the Public Area, with a security door.
- Proximity to the Reception area and the Staff and visits vestibule.

Cafeteria-restaurant Garbage room

- Area: **± 6** m²
- Movements:
 - Persons: Staff.
 - Purposes: Restaurant-waste.
- Degree of accessibility: Grade IV: Minimum accessibility.
- One access from the Cafeteria-restaurant Internal area.
- A direct access for waste removal to the outside, out of clients' sight, and fitted with a security door.
- Maximum insulation.
- Easy-to-maintain and -clean materials able to carry a high dirt load, and allowing washing by flushing pressurised water and using disinfectant products.

Museum Garbage Room

- Area: ± 15 m²
- Movements:
 - Persons: Staff.
 - Purposes: Museum-waste.
- Degree of accessibility: Grade IV: Minimum accessibility.
- One access from the Internal Area with no collections.
- A direct access to evacuate waste outside, in the supplies loading and unloading zone, fitted with a security door.
- Easy-to-maintain and -clean materials.

Cleaning room

- Area: ± 10 m²
- Movements:
 - Persons: Staff.
 - Purposes: Museum-supplies.
- Degree of accessibility: Grade IV: Minimum accessibility.
- One access from the Internal Area with no collections.

Cafeteria-restaurant Office

- Area: ± 10 m²
- Movements:
 - Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- One access from the Public Area, with access control.
- Proximity to the Cafeteria-restaurant, the Cafeteria-restaurant Food storeroom and staff toilets.

Shop-bookshop Office

- Area: ± 10 m²
- Movements:
 - Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- One access from the Public Area, with access control.
- Proximity to the Shop-bookshop, to the Shop-bookshop Storeroom and staff toilets.

Night Surveillance Office

- Area: ± 20 m²
- Distributed into a Working zone and Rest area.
- Movements:
Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- One access from the Internal Area with a security door.

Administrative Offices

- Area: **40 - 50** m²
- Preferably an open working zone for 5-6 stations; if not possible, five offices each of 10 m².
- Movements:
Persons: Staff; Researcher/Collaborator.
- Degree of accessibility: Grade III: Restricted accessibility.
- One access from the Public Area or from the Internal Area where there are no collections, and with access control.
- Proximity to Staff toilets; the Staff and visits vestibule; Staff Rest hall.

Cafeteria-restaurant Food storeroom

- Area: ± 10 m²
- Movements:
Persons: Staff.
Purposes: Food.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single access from the Internal area of the Cafeteria-restaurant, allowing suitable access for waiters, goods, carts and pallet carriers.
- Proximity to the food access zone.
- Able to be fitted with food storage equipment.
- Easy-to-maintain and -clean materials.

Alarm control station (ECA)

- Area: **25 - 30** m²
- Two zones: Working zone and private toilet.
- Movements:
Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single access with security door.
- Direct connection with Security: electrical panels.

Protocol Hall Office

- Area: ± 10 m²
- Movements:
 - Persons: Staff.
 - Purposes: Food; Museum-waste.
- Degree of accessibility: Grade IV: Minimum accessibility.
- Direct access from the Protocol Hall.
- Access from the Internal Area where there are no collections.
- Proximity to the Cafeteria-restaurant Kitchen.
- Application of food handling and movement standards.
- Finished in materials allowing continuous washing with disinfectant products.

Reception and access control

- Area: ± 10 m²
- A counter is installed open to the Staff and visits Vestibule; an area for telephone exchange and pigeon-holes.
- Movements:
 - Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single access from the Staff and visits vestibule.
- Close to Changing facilities, Administrative Offices, the Staff rest hall.

Staff rest hall

- Area: **25 - 30** m²
- Capacity: 15.
- Includes an area for acquiring and preparing products; rest zone.
- Movements:
 - Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single access from the Internal Area with no collections.
- Close to Changing facilities, Administrative offices, ECA, and the Staff and visits vestibule.

Installation halls

- Area: **410 - 490** m²
- This comprises as many installation rooms as may be necessary for the different systems, and transformer and sectioning centres which can be situated in different parts of the building.
- Movements:
 - Persons: Staff.
 - Purposes: Museum-supplies.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single, easily-accessible access from the Internal Area with no collections.
- Close to the Supplies loading and unloading area; Storerooms; Maintenance workshops.

Maintenance workshops

- Area: **± 40** m²
- Equipped with a workbench area, material storage area; office area.
- Where possible, compartmentalisation into areas of electricity, climate, painting and joinery will be considered.
- Movements:
 - Persons: Staff.
 - Purposes: Museum-supplies; Museum-waste.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single access from the Internal Area with no collections.
- Close to Changing facilities, Staff toilets, Maintenance storeroom, Installation halls, Supplies loading and unloading zone.
- Air renewal and extraction systems and paying special attention to fire protection.
- Resistant and easy-to-clean finishes.

Staff and visits vestibule

- Area: **± 20** m²
- Includes an Access and information zone and a Waiting zone.
- Movements:
 - Persons: Staff; Researchers/collaborators.
- Degree of accessibility: Grade III: Restricted accessibility.
- One access from outside and another to the Internal Area with a security door.
- Direct connection to Reception and access control.
- Close to Changing facilities, Offices, Protocol hall, Staff rest hall.

Changing facilities

- Area: **120 - 140 m²**
- Separate changing facilities for women and men.
- Each has lockers and dressing rooms, a shower area and a sanitary facilities area.
- Movements:
Persons: Staff.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single access from the Internal Area with no collections, close to the Public Area.
- Close to the Staff rest hall and the Staff and visits vestibule.

Zone for temporary waste collection

- Area: **± 20 m²**
- Movements:
Persons: Staff.
Purposes: Museum-waste; Shop-waste.
- Degree of accessibility: Grade IV: Minimum accessibility.
- A single access from the Internal Area where there are no collections.
- Proximity to the Supplies loading and unloading zone.

Supplies and waste loading and unloading zone

- Area: **40 - 50 m²**
- Distribution of spaces: a stopping zone with wheeled access for trucks and distributor vehicles; Access by a platform in the floor or the span in the façade; a security control post with scanner; Inside space for collection and distribution.
- Movements:
Persons: Staff.
Purposes: Museum-waste; Museum-waste.
- Degree of accessibility: Grade IV: Minimum accessibility.
- One access from outside with a security door installed and another from the Internal Area where there are no collections.
- Direct connection to the Museum's Garbage room and the Temporary waste collection zone.
- Close to Storerooms, Maintenance workshops and Installation halls.
- Resistant and easy-to-maintain and -clean finishes.

MOVEMENTS

Circulation and movement areas

- Area: 300 - 350 m²

5. FORECASTS FOR THE PROJECT'S DEVELOPMENT AND IMPLEMENTATION

5.1. DEVELOPMENT OF THE PROJECT

Following a decision in the competition regulated in these Specifications, the *Museo Nacional del Prado* will initiate a negotiated procedure to adjudicate the service to draw up the project for implementation to the participant classified in first place, as provided for in Article 174.d of aforementioned Legislative Royal Decree No. 3/2011 of 14 November of the Reform Public Sector Contracts Act (TRLCSP).

The negotiation will address the financial cost of the service in the terms of the guideline budgets for the work appearing as the purpose of said contract. Should no understanding be reached with the first participant classified, or it is found that this candidate does not comply with the legally required terms of solvency, negotiations will be conducted consecutively with the following classified participants.

The *Museo Nacional del Prado* reserves the right, should it consider it necessary, not to begin said adjudication, for justified reason. Participants shall have no right of indemnification.

The Project will be implemented in three phases:

- Preliminary project
- Basic project
- Construction project

The following are the deadlines for their preparation:

- Preliminary project: 5 months and 15 days
- Basic project: 4 months and 15 days
- Construction project: 4 months and 15 days

Before drafting the Basic Project, the winner must, if so required by the applicable provisions, draw up the associated Planning Instrument (Special Plan, Detailed Study, etc.), setting out specific action to demolish, reconstruct, consolidate or substitute any elements permitted under the regulations, along with proposals to recover, restore and enhance singular elements.

Before starting to draft each phase of the project, and following delivery of each, the Coordination Team appointed by the *Museo Nacional del Prado* will issue a technical report whose indications must be taken on board in the following phase. For the Construction Project, said report must be favourable in order for it to be accepted.

Pursuant to Article 6 of the Spanish Historic Heritage Act, Act No. 16/1985 of 25 June, as it involves a state-owned building in which a state-owned and state-managed museum is to be installed, the project must be endorsed by the Spanish Cultural Heritage Institute and reported on by the Supervising Office in the Ministry of Education, Culture and Sport's Infrastructures and Equipment Management.

5.2. JOBS TO BE DONE BY THE DRAFTING TEAM TOGETHER WITH THE PROJECT

In addition to drafting the project for the Salón de Reinos ARCHITECTURAL REHABILITATION AND MUSEOLOGICAL ADAPTATION (Preliminary Project, Basic Project and Construction Project) and, as necessary, including TECHNICAL STUDIES supplementing those included as Annexes to the Programme of Architectural Requirements to be

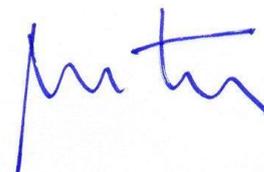
**MUSEO NACIONAL
DEL PRADO**

delivered to the participants selected for the second phase of this competition, the Prado National Museum will contract the following jobs with the adjudicatee:

- SITE MANAGEMENT.
- Drafting of the SAFETY AND HEALTH STUDY and SAFETY AND HEALTH COORDINATION during the works.
- Preparation of COMPUTER GRAPHICS and MOCK-UPS.
- To draft the ACTIVITY PROJECT.
- To draft the BUILDING MANIFEST.

Award of said contract goes hand-in-hand with an obligation on the part of the winner, if required and at no cost to the Museo Nacional del Prado, to draw up a Special Plan or any other urban instrument needed to implant the design proposed for the building by the bidder, and for the infrastructures it affects in the area around the action, in the terms set out in the proposal, as response to these bases.

The Director of the *Museo Nacional del Prado*



Miguel Zugaza Miranda

Madrid, February 25, 2016